COUNTY BOROUGH OF BOOTLE.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

1925.

F. T. H. WOOD, O.B.E., M.D. (Lond.), B.S., B.Sc., D.P.H.

Medical Officer of Health, School Medical Officer, Administrative Tuberculosis Officer, and Medical Superintendent of Corporation Hospital, Sanatorium, and Maternity Home.

BOOTLE:
BOOTLE TIMES, LIMITED, 30, ORIEL ROAD.

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CONTENTS.

BOOTLE TOWN COUNCIL 1924-1925.

§†*His Worship the Mayor (B. Wolfenden, Esq.).

Mr. Alderman Barbour, J.P.
†Mr. Alderman Booth, J.P.
Alderman Sir Wm. Clemmey, J.P.
Mr. Alderman Johnston, J.P.
Mr. Alderman Jones, J.P.
Mr. Alderman Mack, J.P.
§*Mr. Alderman Pearson, J.P., M.R.C.S.
§*Mr. Alderman Roberts, J.P., L.R.C.P.
Mr. Alderman Smith, J.P.
Mr. Alderman Tomlinson.
Mr. Alderman Turner, J.P., M.A., M.D.
§†*Mr. Councillor Baucher.
Mr. Councillor Benson.
†Mr. Councillor Black.
†Mr. Councillor Eaton.
†Mr. Councillor Fairlie.
Mr. Councillor Flynne.
Mr. Councillor Gardner, J.P.
Mr. Councillor Garvey.
§*Mr. Councillor Grainger.
†Mr. Councillor Hackett.
Mr. Councillor Hankey
§†*Mr. Councillor Hanlon
*Mr. Councillor Harris.
Mr. Councillor Hayward.
Mr. Councillor Hughes.
Mr. Councillor Jones.
§*Mr. Councillor King.
§†*Mr. Councillor Mahon.
†Mr. Councillor Mulhern.
†Mr. Councillor Patrick, J.P.
§*Mr. Councillor Pennington, J.P.
§*Mr. Councillor Regan, M.B.
§†*Mr. Councillor Roberts.
Mr. Councillor Sankey.
Mr. Councillor Scholefield.
Mr. Councillor J. Scott.
§†*Mr. Councillor W. Scott.
§†*Mr. Councillor Smith.
†Mr. Councillor Stewart.
Mr. Councillor Vaux.
Mr. Councillor Warburton.
Mr. Councillor Webster.

* Member of Health Committee.
§ Member of Maternity and Child Welfare Sub-Committee.
† Member of Housing and Town Planning Committee.

HEALTH COMMITTEE.

Chairman—Mr. Councillor Pennington, J.P.
Deputy Chairman—Mr. Councillor W. Scott.

MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

Chairman—Mr. Councillor Pennington, J.P.

This Committee consisted of members of the Health Committee (as indicated), together with the following representatives of the Bootle Health Society:—

Chairman—The Mayoress (Mrs. Wolfenden), (ex-officio).
Honorary Secretary—Mrs. Pearson.
Mrs. J. G. Blackledge.
Mrs. K. A. Dodd.

and representatives of the Bootle Insurance Committee:—

Miss M. E. Barton.
Mrs. E. H. Smith, J.P.

HOUSING AND TOWN PLANNING COMMITTEE.

Chairman—Mr. Councillor Baucher.
Deputy Chairman—Mr. Councillor Eaton.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health, Administrative Tuberculosis Officer, and Medical Superintendent of the Corporation Hospitals—

*F. T. H. Wood, O.B.E., M.D., B.S., B.Sc. (Lond.), D.P.H. (Durh.).

Tuberculosis Officer and Deputy Medical Officer of Health—

*Robert Hannah, M.C., M.B., Ch.B. (Edin.), D.P.H.

Assistant School Medical Officer and Assistant Medical Officer of Health—*Purser Davies, M.C., M.B., Ch.B. (Edin.), D.P.H.

Corporation Hospital, Linacre Lane—

Matron—*Miss M. Johnson.

Maghull Sanatorium—

Visiting Medical Officer (Part-time)—*A Hendry, M.D. (Liverpool).

Matron—*Miss E. Holden, R.R.C.

Maternity Home:

Matron—*Miss M. W. Cleary.

Chief Sanitary Inspector, Inspector under the Food and Drugs Acts, and the Housing, Town Planning, etc., Acts, etc.—

[12]R. J. McCulloch.

Sanitary Inspectors—

[12]B. J. Holden. [1]W Robson. [12]J. Yates.

Clerical Staff—

Chief Clerk - N. Lockwood.

H. A. Brown, O.B.E. Miss Thompson. *Miss Thomas

*Miss Maxwell (Half-time). S. Astley.

Infant Welfare Visitors—

*[346]Miss Stott. *[1]Mrs. McKowen. *[345]Mrs. Meredith.

*[345]Miss Hughes. *[347]Miss Stark.

*[347]Miss Thomas.

Tuberculosis Nurse—*[7]Miss Kelly.

Ante-Natal Clinic Medical Officer (Part-time)—

*J. St. Geo. Wilson, M.C., Ch.M., F.R.C.S.

[1] Certified Sanitary Inspector. [2] Certified Inspector of Foods. [3] Certified Health Visitor. [4] Certified Midwife. [5] Half-time Tuberculosis Visitor. [6] Assistant Inspector of Midwives. [7] Trained Nurse.

*Contributions to salary by Exchequer grants.

Health Department,
Town Hall,
Bootle,
March, 1926.

To the Mayor, Aldermen, and Councillors
of the County Borough of Bootle.

Gentlemen,

I have the honour to present herewith the fifty-third Annual Report on the work of the Health Department. It is somewhat fuller than those of the last four years inasmuch as the Ministry of Health has requested that it should be of the nature of a "Survey" Report, giving information on a number of matters not ordinarily dealt with, and reviewing the sanitary progress of the district since the end of 1920.

In respect of the year 1925 attention may be directed to the following features of interest:—

(1) A rise in the general death-rate from the record low figure of 1924, and an increase in the tuberculosis death-rate.

(2) A slight fall in the infant mortality rate, which has now been below 100 for the last seven years.

(3) An abnormally low incidence of scarlet fever, the smallest number of cases since 1913 having been reported.

(4) The installation of apparatus for ultra-violet light treatment, from which an improvement in the treatment of certain forms of non-pulmonary tuberculosis and of children suffering from rickets is confidently expected.

(5) An improvement in the Maternity and Child Welfare scheme arising out of the establishment of an additional Infant Consultation, and the appointment of an additional Health Visitor.

(6) A substantial advance in the Council's Housing Scheme.

QUINQUENNIAL REVIEW.

The five years since 1920 have been years of bad trade and unemployment, constituting times which formerly would have laid a heavy toll on the common health and which would have had their reflection in swollen death-rates. This being so, merely to have held ground would have been creditable, but when an actual improvement in the public

health, as estimated by its vital statistics, can be recorded there is additional cause for gratification. The credit for such prevention of loss of efficiency, health, and life, is in large part due to the extensive schemes of public assistance characteristic of the period; the degree in which such schemes are necessary locally can be measured by the statement that in December, 1925, about one in six of the adult male population was on the "live" unemployed register.

The quinquennial period has seen an increase of 5,460 in the population; an annual death-rate which has never been above 13 per 1,000 and has fallen as low as 11·6; and a progressive fall in the birth-rate to the figure of 23·3, which, however, is still relatively high when contrasted with the unprecedentedly low figures now being recorded in the country generally.

An examination of the *causes of death* demonstrates the increasing importance of cancer, which was returned in 69, 66, 73, 79, and 94 cases successively in the years under review, last year's experience, therefore, being that one death in eleven was due to this cause. Two facts at least are known about these malignant growths, viz., that their early removal by operation offers the only, but a very encouraging, prospect of cure, but that unfortunately the obtaining of medical advice is commonly deferred to the late stages of the disease. Action to spread such knowledge by press articles and by leaflets has accordingly been undertaken during the last two years, as being the only resource at present open to the local health authority.

Epidemic and infectious disease incidence was low throughout the period, and it is a matter for congratulation that the town escaped infection with smallpox, in view of the prevalence of this disease in so many parts of the country.

Improvement in *general sanitary administration* can be recorded in the execution of schemes to reduce the number of ashpits, from which household refuse is removed only at monthly intervals, firstly, by the exercise of statutory powers to contribute in certain cases to the cost of their abolition, and secondly, by the amendment of a bye-law prescribing the type of ashbin to be fixed in substitution. Further, agreement has been reached on the detail of the new scheme for the salvage and incineration of the town refuse, and sanction has been received for the immediate erection of new refuse disposal works.

There have been many administrative improvements in the *sanitary control of the food supply*, full reference to which is made in the

body of the report, but one matter calling for special mention is the continuance of the unsatisfactory state of the milk supply. This remains demonstrably dirty, and a potential source of danger to child life, but the general public, by its unwillingness to recognise that difference in quality calls for difference in price, continues to sanction the production and distribution of this important food under highly unsatisfactory conditions.

The incidence of *tuberculosis* here and in adjoining Merseyside has for long been one of the displeasing features of the public health, and the five years under review show no great cause for congratulation, although as aforesaid, in the absence of public assistance schemes and a well-organised anti-tuberculosis service, a much higher death-rate from tuberculosis than the recorded 1·66 per 1,000 would have resulted. The most encouraging thing that can be said in this regard is that the country generally shows a progressive decrease in the tuberculosis death-rate, from which it is a safe epidemiological conclusion that tuberculosis will be negligible as a cause of death in forty or fifty years, and that the local retardation in the decline will not indefinitely postpone a similar desirable state of things in Bootle. During the five years an improvement has been made in the Council's tuberculosis scheme by the opening at Linacre Hospital in 1922 of the well-designed 28-bed Pavilion for established cases of pulmonary tuberculosis, and more recently by the installation of apparatus for the ultra-violet light treatment of non-pulmonary tuberculosis.

As regards *venereal diseases*, an almost stationary position has been reached in which the number of new infections remains constant year by year, the figure, however, being well below the peak years of 1919 and 1920; there have been improvements in the clinic organisation which have been reflected in an increased attendance of individual cases, and a fall in the number of cases ceasing attendance before completion of treatment had rendered them non-infectious.

The Council's scheme for promoting *maternity and child welfare*, one of the cheapest and most fruitful of its activities, has also been the section of Health Department work showing greatest expansion. The underlying principles of imparting instruction on the care of the health of the infant and the expectant or nursing mother, and of providing facilities for such knowledge to be easily applied in every-day life, have been constantly kept in mind, and have met with striking success.

The ante-natal clinics, which had been increased to two consultations weekly shortly before the opening of the period under review, have so established themselves in the public appreciation that practically one in every four expectant mothers now presents herself for examination and advice before the date of her confinement.

The usefulness of these clinics has from 1922 been greatly increased by their association with the *Maternity Home* then established, in that cases in which medical or obstetric difficulty is foreseen can be referred for their confinement to an institution in which the necessary facilities for the conduct of difficult midwifery can be obtained. From another standpoint the Maternity Home has enabled a large number of confinements to take place in conditions of decency and comfort not otherwise obtainable in the present conditions of the housing of the people, and, in brief, it may be said that the five hundred patients who have passed through the Home have received benefits which well repay the cost of the institution.

The health of infants, as judged by the fall in the infantile mortality rate, when compared with preceding quinquennial periods, has immensely improved. Although, however, an examination of the causes of infant death demonstrates the virtual disappearance of intestinal diseases which formerly occurred owing to infection of the infant's food, no real improvement can be recorded in the number of deaths due to respiratory disease. Furthermore, the deaths of infants in their first month of independent existence still remain as high as they did twenty or thirty years ago, and are responsible for a third of all the deaths of infants under one year of age.

Early in the period under review the steadily increasing attendances at the Infant Consultations threatened to impair the medical efficiency of the clinics which then were supervising one half of the babies of the town, and consideration was given from time to time to the establishment of additional weekly consultations; this desirable object was not attained until towards the end of 1925, and then only in part, and there is still room for improvement in the conditions under which this valuable work is carried on.

The realisation of the fact that the maintenance of the health of the average person lies at the basis of national well-being, and of the corollary that systematic attempts must be made to instruct each individual as to methods of safeguarding his own bodily health, may be presented as another outstanding development of the last five years. *Systematic public health education* must employ the methods of the

successful commercial advertiser, and by striking leaflets, cinematograph films, press articles, broadcasting and other forms of public speaking, the public health message must be got home to the individual. Locally some or all of these methods have been followed, and their continued use must henceforward be looked upon as one of the essential activities of the Health Department.

The fundamental problem of how to provide decent homes for the small wage-earning classes has received constant attention, as the waste in health and effort resulting from present conditions is generally realised. As regards the provision of new houses it may perhaps be said that the erection of some 400 municipal houses, when considered in relation to an increase of 5,460 in the population, has not done much towards the solution of the problem, but a halt has not yet been called, and municipal schemes are to continue to function.

Coming down to facts of departmental interest, it may be noted that the reduction of the whole-time medical staff from four to three recommended in 1920 has been followed by no diminution in the output of work; indeed, various clinic extensions equivalent to four extra half-days of duty each week have been made, and it has so far been possible to undertake also the additional work arising out of the abundant new health legislation. It must be pointed out, however, that infectious disease incidence has been exceptionally low for the last two years, and even a return to normal in this regard will seriously tax the capabilities of the staff.

Lastly, the financial aspect of health department work calls for consideration, and it may be recorded that the annual cost to the rates of the activities controlled by the Health and Maternity and Child Welfare Committees fell from £20,382 in 1920-21 to £15,717 in 1924-25.

Sincere thanks are accorded to the Chairman and Members of the Health Committee for their continued support and appreciation of the Department's efforts—efforts in which an excellent staff have given their best services; while special mention is made of the valued and unstinted help of Dr. Hannah in connection with tuberculosis and infectious diseases; of Mr. McCulloch, Chief Sanitary Inspector, and of Mr. Lockwood, Chief Clerk, in their respective departments.

I have the honour to be,

Your obedient Servant,

F. T. H. WOOD,

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1925.

Registrar-General's Estimated Population in July, 1925 ...	83,260
Death-rate per 1,000 of the population	13·1
Birth-rate per 1,000 of the population	23·3
Infantile Mortality per 1,000 births	97
Death-rate from Phthisis per 1,000 of the population ...	1·36
Death-rate from all forms of Tuberculosis per 1,000 of the population	1·8

Area in Acres (inclusive of Dock Estate)	1,947
Area in Acres (exclusive of Dock Estate)	1,610
Population at Census of 1921	76,487
Population per Acre (excluding Dock Estate)	51·7
Number of Houses in the Borough on December 31st, 1925	13,831
Average Number of Persons in each structurally separate dwelling, at Census, 1921	5·64
Number of Births	1,943
Number of Deaths	1,091
Natural increase of the population during the year	852
Number of Deaths of Infants (under the age of one year)	188
Death-rate from the seven principal Zymotic Diseases—Smallpox, Whooping-Cough, Measles, Diphtheria, Diarrhoea, Scarlet Fever, and "Fever" (Typhoid, Enteric, and Typhus) per 1,000 of the population	1·15
Death-rate from Diarrhoea and Enteritis, of children under two years, per 1,000 births	20·6

The Rateable Value of the Borough for 1925-26 was ...	£609,225
A Penny Rate on the Borough Fund produced in 1925-26 ...	£2,196

In 1925-26 the Borough Rate was 8/4½, and the total rates 13/0 in the pound (excluding water rate and charges).

The net cost to the rates of the Health Services during 1925-26 is estimated at £15,175 approximately, equivalent to a rate of 7·0 pence in the pound.

COUNTY BOROUGH OF BOOTLE.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH.

1. NATURAL AND SOCIAL CONDITIONS.

Physical Features and General Character.

The County Borough of Bootle has an area of 1,947 acres excluding the bed of the Mersey, and of 1,610 acres excluding the Dock Estate. It is bounded on the south and east by the City of Liverpool, and on the north by the Urban Districts of Waterloo-with-Seaforth, and Litherland. The western boundary of the Borough abuts on the mouth of the River Mersey.

The land falls from east to west, i.e., towards the river. The highest parts are situate on the extreme north-east and south-east boundaries, and reach a height of 125 feet above mean sea-level. The lower portion adjoining the docks is from 22 to 24 feet above mean sea level.

Geologically the upper layer consists of drift sand varying in depth, below which there is in places a layer of clay. Underneath this is red sandstone, which appears at the surface in certain parts of the town.

Social Conditions.

Occupation and Industrial Status.—The information obtained from the 1921 Census as to the occupations followed by the inhabitants of the town is of importance in that the large proportion of the population shown to be dependent on the earnings of casual labour inevitably has its reflection in the health statistics. The total number of male persons over the age of 12 years was returned as 27,788, and 8,912 of these, or almost one-third, were entered as persons employed in transport and communication, either on the railway, the road, or on the water; the last-named group included 3,051 persons engaged in the Mercantile Marine, and 2,881 as dock labourers. The next largest

group of occupied males was that of metal workers, numbering 2,975, or 11 per cent. of the total occupied males. Another large group consisted of general labourers numbering 2,172 or 8 per cent. of the total occupied males, followed by clerks and typists, commercial workers such as shop keepers and shop assistants, and workers in wood and furniture, each of which three groups made up 5 per cent.

The total number of female persons over the age of 12 years was 29,274, and of this number 8,700 were entered as in various occupations. Personal service accounted for 2,360 or 27 per cent., work in commercial occupations such as shop assistants, etc., accounted for 1,272, or 15 per cent., clerks and typists 980 or 11 per cent., while makers of articles of dress, etc., numbered 731 or 8 per cent.

Fuller information as to occupation will be found in Appendix 2 on pages 60 and 61.

Public Assistance and Medical Treatment—Valuable information as to economic conditions having a bearing on the health of the town is obtained from data kindly supplied by the Clerk to the West Derby Board of Guardians, by the Managers of the three Employment Exchanges situated in Bootle, and by the Clerk to the Bootle Insurance Committee.

It appears that during the year 1925, 1,143 persons were received from the Borough into the medical institutions of the West Derby Board of Guardians, and £25,103 10s. 0d. was expended in out-door relief to Bootle residents. Further, the average number of adult males on the "live" unemployed registers in the last week of each month during the year was estimated to be 6,522; average numbers of women and of juveniles were 707 and 802 respectively.

As regards National Health Insurance, the total number of insured persons in the Borough on the 1st April, 1925, was 31,746, or 38 per cent. of the total population. The Insurance Committee's figures of the number of prescriptions made up during the last five years show a very interesting and steady increase from 50,738 in 1921 to 95,665 in 1925; with a corresponding increase in the annual cost of medicines from £1,955 to £3,248. It is an interesting speculation as to whether this increase represents a falling off in the public health—an assumption not supported by other statistics—or an increased reliance on the efficacy of drugs.

During the year 1,650 in-patients and 26,252 out-patients were treated at the Bootle Borough Hospital, as compared with 1,788 and 23,756 respectively during 1924. It should be noted that in addition Liverpool hospitals, both general and special, are also attended by Bootle residents.

II. VITAL STATISTICS.

Population.—At the census in 1881 the population was 27,374; in 1891, 49,217; in 1901, 58,556; in 1911, 69,876, and in 1921, 76,487. The Registrar General's estimate of the population at the middle of the year 1925 was 83,260, and from this figure the various rates in this report have been calculated.

Age Distribution.—The age-distribution of the local population at the 1921 census is interesting, in that Bootle proved to be amongst the youngest of the Lancashire County Boroughs with an average age of 27·7 years, as contrasted with 29·9 years for the whole of the country.

The age distribution closely resembles that of Liverpool, and shows 302 per 1,000 of the population to be under the age of 14 years, as against 272 for the country as a whole. At the other end of the scale Bootle only returns 66 per 1,000 of the population as over the age of 60 years, as against 87 in England and Wales generally.

The estimated number of males was 40,717, and of females 42,543.

Size of Families.—The average number of persons per family in Bootle was given at the Census as 4·80, and indicates a diminution in size of the family from 4.97 at the Census of 1911. This diminution is observed in all but nine of the areas in Lancashire for which comparative figures are available. The largest families were found in Haydock, (5.42 persons per family), St. Helens (5·09), and Widnes (5·03), and the smallest in Wardle (3·55) and Norden (3·60)—the county average being 4·27.

Births.—During the year 1,943 births to Bootle parents were registered, representing a birth-rate of **23·3 per 1,000** of the population, that for England and Wales being 18·3. In 1924 the Bootle birth-rate was 23·4, and for the decennium 1915-24 it was 25·4. There were 969 males and 974 females. It may be noted that the birth-rate, which rose from the abnormally low figures of the war period to a maximum of 29·7 in the first quarter of 1920, has continued to fall from that date, but is well above the figure for the country generally.

This fall, and the extent of its lag behind the general decline in the birth-rate, are shown in the following table:—

	BOOTLE.		ENGLAND & WALES.
	Total Births.	Rate per 1,000.	Rate per 1,000.
1914 ...	2,321	31·7	23·8
1915 ...	2,050	27·6	21·9
1916 ...	2,076	26·8	20·9
1917 ...	1,873	24·4	17·8
1918 ...	1,810	22·5	17·7
1919 ...	1,914	23·9	18·5
1920 ...	2,289	28·6	25·5
1921 ...	2,068	26·6	22·4
1922 ...	2,051	25·7	20·4
1923 ...	1,999	24·5	19·7
1924 ...	1,942	23·4	18·8
1925 ...	1,943	23·3	18·3

The illegitimate births numbered 74, and were 3·8 per cent. of the total; 31 took place outside the borough. In 1924 the total number was 50; in 1923, 56; and in 1922, 64.

The natural increase of population, *i.e.*, the excess of births over deaths was 852, being a rate of 10·2 per 1,000 of the population; in 1924 it was 976, or 11·7 per 1,000; in 1923 it was 929, or 11·4 per 1,000; and in 1922 it was 958, or 12·0 per 1,000.

Deaths.—The number of deaths registered in Bootle during the calendar year was 820; this number includes the deaths of 53 non-residents which occurred in the borough, 45 of whom died in the Borough Hospital, five in Linacre Hospital, two in the Liverpool Maternity Home, and one in the Bootle Maternity Home. Three hundred and twenty-four persons who died in other parts of the country were stated to have been inhabitants of Bootle; these include 269 who died in Poor Law Institutions, 35 who died in Voluntary Hospitals in the City of Liverpool, and 16 in Lunatic Asylums.

When the necessary adjustments in these respects have been made the total number of deaths assigned to Bootle is 1,091, which is a death rate of **13·1 per 1,000** of the population, as compared with 11·6 in 1924 and 13·1 in 1923. The death-rate in Bootle for the

decennium 1915-1924 was 15·3, and for 1905-1914, 17·3. The crude death-rate of the 105 great towns of England and Wales during 1925 was 12·2, compared with 12·3 in 1924. The table below sets out recent variations in the local death-rate as compared with the country as a whole :—

Year.	BOOTLE.		ENGLAND & WALES.
	Total Deaths.	Rate per 1,000.	Rate per 1,000.
1914 ...	1,242	17·0	14·0
1915 ...	1,286	17·9	15·7
1916 ..	1,279	18·0	14·3
1917 ...	1,213	17·6	14·2
1918 . .	1,429	19·4	17·3
1919 ...	1,154	15·0	14·0
1920 ...	1,136	14·2	12·4
1921 ...	1,010	13·0	12·1
1922 ...	1,093	13·7	12·8
1923 ...	1,070	13·1	11·6
1924 ...	966	11·6	12·2
1925 ...	1,091	13·1	12·2

The death-rate during the first quarter of the year was 15·0, during the second, 12·0; the third, 11·3; and the fourth, 14·1.

The number of deaths which occurred in institutions was 466, *i.e.*, 43 per cent. of the total deaths, compared with 39 per cent. in 1924; 37 per cent. in 1923, and 36 per cent. in 1922. The steady increase in this regard since the war illustrates a change in the public attitude, accelerated no doubt by the fact that housing conditions make it difficult to keep invalids at home.

Mortality in Relation to Sex.—There were 608 deaths of males, and 483 of females.

Infantile Mortality. There were 188 deaths of infants, compared with 192 in 1924, 170 in 1923, and 164 in 1922. The infantile mortality rate was **97 per 1,000** births, compared with 99 in 1924, 85 in 1923, 80 in 1922, and 102 in the decennium 1915-1924. The rate of infantile mortality amongst males was 105, and amongst females 88. Throughout England and Wales the rate of infantile mortality was 75 per 1,000 births, and in the 105 great towns it was 79.

This important subject is dealt with in detail in a later section on pages 46 to 52.

Thirty-six children died before they were a week old, and a total of 66, or 35 per cent., of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 34·0 per 1,000.

Child Mortality. In 1925 there were 110 deaths of children aged 1 to 5 years, as compared with 89 in 1924 and 115 in 1923. The principal causes were—respiratory diseases 38; measles 21; whooping-cough 9; tuberculosis 8; diarrhoea 11; and accidents 5. It is noteworthy that all the above are, in theory, preventable causes, although, at present, conditions of unemployment, overcrowding, and imperfect knowledge of infant care, militate against the realisation of the theory in practice.

Uncertified Deaths.—Seventy-five deaths (48 of residents and 27 of non-residents) were the subject of a Coroner's inquest, while in 33 cases the death was registered without certification by a medical man or the Coroner; this is equivalent to 3.0 per cent. of uncertified deaths, as compared with 1·0 per cent. in the country generally.

Causes of Death. The causes of death, classified according to age, are shown in the table on page 63.

Tuberculosis in one form or another was responsible for 132 deaths, or 12·1 per cent. of the total, as compared with 115, or 11·9 per cent., in 1924; and 185, or 12·6 per cent., in 1923. This matter is further dealt with in the Tuberculosis Section of this report.

Pneumonia was responsible for 146 deaths, bronchitis for 70, and other respiratory diseases for 16, making the total deaths from respiratory diseases (excluding tuberculosis) 232, or 21·3 per cent. of the total deaths at all ages, as compared with 218, or 22·6 per cent., in 1924. Influenza was entered as a cause of death in only 8 cases, as against 10 in the preceding year.

The group of diseases included under the heading "congenital debility and malformation, including premature birth," accounted for 70 deaths, compared with 66 in 1924. This matter is again alluded to in the Maternity and Child Welfare Section of this report.

The epidemic diseases (excluding influenza) were responsible for 96 deaths, as compared with the average of 112·8 during the preceding ten years. There were 27 deaths from measles, as contrasted with 18 in 1924, 4 deaths from diphtheria, as against 2 in 1924; 16 deaths from whooping cough, as against 12 in the previous year; and 5 deaths from scarlet fever, as against 7. The deaths from diarrhoea and enteritis were 44, as against 25 during 1924; forty occurred in children under two years of age.

Cancer was registered as the cause of death in 94 cases, as contrasted with 79 in the preceding year. This represents a cancer death-rate of 1·13 per 1,000 of the population as compared with 1·01 during ten years 1911 to 1920, 0·68 per 1,000 during the first ten years of this century, and with 0·55 during the ten years 1891 to 1900. Considerable attention is being given to the increasing national mortality from malignant disease, and the policy of spreading information as to the early signs of cancer and as to its curability by operation in the early stages is being steadily pursued. Deaths from violence numbered 35 (including six from suicide), the same number as in the previous year.

III. SANITARY CIRCUMSTANCES.

Water Supply.—The water supply is constant and the Analyst's reports show it to be of excellent quality. A little Green Lane well water mixed with that from the other sources is occasionally supplied to the upper parts of the borough, but the town is in general supplied with Vyrnwy or Rivington water, or a mixture of these.

Drainage and Sewerage.—The sewerage system is entirely by gravitation, discharging direct into the River Mersey. The borough is divided into four drainage districts, with four separate outfalls into the river. One of these outfalls is used solely for Bootle, and one in addition conveys the sewage from Walton Gaol, situate within the City of Liverpool; one is used jointly with Liverpool, and the fourth drains a part of Seaforth and the greater portion of Litherland, both Urban Districts.

Speaking generally, the sewers within the borough are, so far as is known, sufficient for its needs, though occasionally, after very heavy rainfall, a few of the cellars in the lower part of the town are flooded.

The sewers have good falls, and, with the exception of some passage sewers, are self cleansing; to these latter, automatic flushing tanks, supplied with salt water, are fixed.

Since October, 1903, all new house drains have been subjected to a water test before finally being approved.

Closet Accommodation and Scavenging.—Every house, with the exception of 23 in the outlying parts of Orrell, is provided with one water closet or more, the conversion of middens having been completed in 1910.

The following is the number of ashbins and ashpits in the borough; the ashbins were emptied weekly, the ashpits every four to six weeks, and the middens every six to eight weeks:—

	1925.	1924.	1923.	1922.	1921.	1914.
Ashbins	6169	5493	5366	5285	4899	4645
Ashpits, single ...	1224	1289	1316	1397	1429	1486
Ashpits, double ...	3932	4169	4216	4239	4295	4336
Middens, single ...	21	21	21	21	21	21
Middens, double ...	1	2	2	2	2	2

Ashpit Conversions.—It will be remembered that the Bootle Order, 1914, empowered the Corporation to contribute one-half of the cost of the abolition of fixed ashpits, and of the provision of movable ashbins in their place, in instances where the Medical Officer of Health certified that the situation of the ashpit was prejudicial to health, and that under those powers, the ashpits of 301 houses, in certain congested areas, with small yard space, were dealt with after the commencement of operations in 1920.

There remain, however, a large number of houses in which the certificate required by the Bootle Order of 1914 cannot be given, although there is general agreement that domestic refuse should be removed from the neighbourhood of the house at intervals of certainly not longer than a week.

The voluntary abolition of such ashpits by property owners, which was slowly proceeding, had, however, been hindered by the 1907 Byelaw calling for the substituted ashbins to be fixed in the wall of the back passage, and accordingly in May, 1925, the approval of the Ministry of Health was obtained to a revision of the Byelaw so as to allow for the provision of an ordinary type of cylindrical portable bin. It is satisfac-

tory to be able to report that following upon the coming into force of the amended Byelaw 427 houses were so dealt with by property owners at no expense to the Corporation.

Further, in order to secure a continuation of such conversions, the Health Committee gave sympathetic consideration at the end of the year to an offer of certain property owners as and when required to make minor improvement in defective ashpits, to abolish such ashpits by blocks if the Corporation would provide the ashbins. It was felt that such division of cost was equitable, and it is proposed to seek powers by a new Provisional Order to enable this to be done, with the hope of completing the abolition of ashpits in the borough within ten years.

Refuse Disposal.—The prolonged consideration given to the provision of a new Refuse Destructor has now resulted in action, and contracts have been let for the erection of destructor plant to deal with the town refuse on a basis of combined salvage and incineration. The site of the present Destructor at Pine Grove will again be used; dust, estimated to comprise about 40 per cent. of the material, will be extracted before the refuse is passed over picking and sorting belts to the destructor cells. The dust, ash, and unused clinker residue will be deposited on the New Farm site at Melling, and a fruitful source of complaint arising from the use of the site adjoining H.M. Prison will then be removed.

SANITARY INSPECTION OF THE DISTRICT.

The Staff for this work consists of the Chief Sanitary Inspector, with three assistants, one of whom is engaged principally on special duties mainly in connection with food inspections.

Nuisances.—On page 65 will be found a tabular statement showing the number of inspections made, and notices served by the Chief Sanitary Inspector. It will be noted that the number of defects for which notices were served on owners shows an increase from 4,019 in the previous year to 4,840 in the year under review; the other work done under the Housing Acts is set out in the Housing Section of this report on pages 55 to 58.

Contagious Diseases of Animals Acts.—The administration of these Acts in so far as relates to the disinfection of premises is in the hands of the Health Department. During the year three cases of parasitic mange were reported, compared with five in 1924, one in 1923, and three

in 1922. Two cases occurred in stables of brick and wood, and one in a wooden stable, and satisfactory disinfection was obtained. One case of anthrax in a dairy cow was reported, and the animal and the premises occupied were suitably dealt with.

Lodging Houses.—There are three common lodging-houses—registered to accommodate 150 lodgers—in the borough, which have received frequent visits of inspection, and have been found to be kept in accordance with the Bye-laws. With regard to houses let-in-lodgings, for the regulation of which Bye-Laws exist, it should be pointed out that under the conditions of the last few years there has been a large increase in houses of this class, and no pretence can be made of enforcing in all respects the Bye-Laws in question; although the occupation, by two or more families, of small houses designed for occupation by one, results in serious faults of hygiene, arising from the absence of a food store, a cooking grate, and a convenient water supply or wash-place.

Canal Boats.—As required by the Canal Boats Acts, inspections have been made throughout the year, and 189 boats have been inspected. Infringements of the Acts and Regulations were noted in respect of 11 defects, and these were remedied by the owners.

Offensive Trades.—The following are the offensive trades carried on in the Borough—Tanneries 2, Fat Melters 2, Bone Boiler 1, Rag and Bone Dealers 6. These were kept under sanitary supervision through the year.

Factories and Workshops.—Particulars of inspections made under the Factory and Workshops Act will be found on page 68. The number of visits paid shows a small increase over preceding years. A note on the condition of the bakehouses appears on page 68.

Smoke Abatement.—It is being increasingly recognised that, apart from actual infringements of the statutory requirements as to non-emission of smoke from industrial chimneys, the interference with the reception of sunlight in our towns on account of continuous slight pollution of the atmosphere with smoke from works and dwelling-houses has a marked influence on the health of the town dweller. By comparison with the average town in South Lancashire the smoke nuisance in Bootle is slight, but the Health Department gives constant attention to it, striving to keep even this down to the minimum. During the year 99 observations of works chimneys were made, and in 11 cases intima-

tions were sent requesting that steps should be taken to reduce the emission of black smoke. In three instances statutory notices were served, followed in one instance by prosecution, when an abatement order was obtained and costs amounting to 14s. 6d. were awarded. Action, however, was not confined to the penal side, but assistance was given to works' owners by the provision of a card, containing hints to boiler attendants, suitable for permanent exhibition, as experience had shown that unnecessary emission of black smoke often arose from ignorance or carelessness in stoking.

Schools.—The sanitary oversight of the schools in the borough is in the hands of the Medical Officer of Health, who is also the School Medical Officer, and full details of the work done in this connection are set out in the Annual Report to the Local Education Authority. School closure was not required at any time during the year.

IV. SANITARY CONTROL OF THE FOOD SUPPLY.

One of the Sanitary Inspectors holding the special Food Certificate of the Royal Sanitary Institute is engaged for the greater part of his time on work connected with the food supply, the sanitary supervision of which is attempted in order to secure cleanliness in the preparation and distribution of foodstuffs, and to diminish the risk of possible infection thereof with disease-producing bacteria.

The year 1925 was notable for the administrative advances made in the sanitary control of the country's food supply.

The Public Health (Meat) Regulations, 1924, containing valuable provisions for the protection of meat from contamination by flies, dust, etc., came into operation on 1st April, 1925.

The Milk and Dairies (Consolidation) Act, 1915, the operation of which had been previously postponed, came into force by order of the Minister of Health on 1st September, 1925. Among the extended powers conferred by this Act is the power of stopping the supply of milk which is likely to cause tuberculosis; the duty of enforcing the stoppage is now placed on the Council of the County or the County Borough in which the cows are kept, and the order made by such Council prohibits the sale of the affected milk in any area. Enlarged powers for taking samples of milk are conferred, and when warranty is pleaded as a defence under the Sale of Food and Drugs Act, the obligation of taking samples from a corresponding milking in course of transit or delivery to the purveyor is imposed.

As a complement to this Act the Tuberculosis Orders of 1925 were subsequently made by the Minister of Agriculture, providing for the notification of tuberculosis in bovines, for the slaughter of affected animals under certain conditions, and for the payment of compensation by the Local Authority.

Hitherto statutory authority for the supervision of the health of persons whose business it is to handle food has been lacking, but an instalment of such necessary powers was granted during the year by the Public Health (Prevention of Tuberculosis) Regulations, 1925. These regulations prohibit any person who is aware that he is suffering from tuberculosis of the respiratory tract from entering upon any employment in connection with a dairy which involves the milking of cows, the treatment of milk, or the handling of vessels used for containing milk, and enable the Local Authority on the certificate of the Medical Officer of Health to require the discontinuance of the employment in such way of any person so suffering.

Further, the Public Health (Preservatives, etc., in Food) Regulations, dated August, 1925, were made by the Minister of Health, and although they do not come into force in their entirety until 1927, deal drastically with the question of preservatives in food; after an interval to allow of the making of adjustments in trade practice such preservatives will be limited to two only, viz., sulphur dioxide and benzoic acid, not exceeding certain specified proportions, and used only in certain named foodstuffs.

Milk Supply.—That portion of the milk supply of the borough which is not brought in by rail is derived from cows kept in shippons, of which there are now 24 in the town; the cows number approximately 357, a decrease from the pre-war figure of about 550. All the shippons received the careful attention of the Inspector, who paid 242 visits to them during the year.

Considerable importance is attached to the necessity for a higher standard of cleanliness in the production and distribution of milk, but it is recognised that as long as milk remains the one article of food for which one price is given irrespective of its quality or its cleanliness there is little or no inducement for the producer to alter his present methods. In this connection it cannot be too often stated that the production of clean milk depends upon exemplary cleanliness of the cattle, the utensils and the workers, and to a much smaller extent on the structural con-

dition of the cow-shed. The bacteriological content of the milk as received by the consumer is an accepted index to the care which has been exercised in its production and distribution, and periodical examination in this respect of the town supply has been carried on throughout the year; it is regrettable to report that judged by such standards local conditions are as bad as elsewhere in the country.

It may be recalled that the Ministry of Health has recognised certain grades of milk, and has prescribed the standard for "Certified Milk" to be that on a sample being taken at any time before delivery to the consumer, the milk shall be found to contain not more than 30,000 bacteria per cubic centimetre, and no Bacillus Coli—the organism characteristic of contamination with manure—in one-tenth part of a cubic centimetre. The standard for the grade next below this, viz., Grade "A" milk, prescribes that on a sample being taken at any time before delivery to the consumer there shall be not more than 200,000 bacteria per cubic centimetre nor any Bacillus Coli in one-hundredth part of a cubic centimetre.

The following table sets out the results of bacteriological examination of samples of the Bootle milk supply, both the local product and that brought in by rail:—

CLEANLINESS OF MILK.

22.	Do.	Do.	[illegible]	[illegible]	[illegible]
23.	Do.	Do.	100,000	1/1,000 c.c.	——
24.	Do.	Do.	370,000	1/100,000 c.c.	——
25.	Do.	Do.	50,000	1/100 c.c.	——
26.	Do.	Do.	27,000	—	——
27.	Do.	Do.	2,916,000	1/100,000 c.c.	——
28.	Do.	Do.	30,186,660	1/10,000 c.c.	——

It will be seen that only in one instance is the standard of "Certified" Milk reached; in only two instances that of Grade "A" Milk, and that in half of the cases the milk can be considered to be grossly contaminated. In the instances where the examination justified it, commendatory letters were sent to the dairymen concerned, while the attention of others was called to the unsatisfactory state of the milk supplied by them.

The result of the bacteriological examination of the 28 samples noted above showed that two samples were reported to be infected with tubercle bacilli; the biological test for such infection is, of course, not completed for four or five weeks, but what action was then possible was at once taken.

In order to encourage the production of pure milk a portion of the milk supplied to the Isolation Hospital from July onwards was taken as bottled "Certified" milk, and similar action was recommended to the Bootle Borough Hospital, in the hope that its adoption by institutions may in time lead to an increased number of milk producers undertaking the supply of a clean and safe article with a resultant fall in its price to a reasonable figure within reach of the general public.

Inspection of Meat and other Foods.—In connection with the new Meat Regulations, meetings were held with the local branches of the Meat Traders' and Provision Dealers' Associations through which the

smooth and efficient working of the regulations was facilitated, and it is satisfactory to note that the spirit underlying them has been generally observed.

As in 1914, there was only one slaughter-house in the Borough, and this was not used during 1925.

The food shops, which received frequent visits of inspection, numbered 657—butchers 72, grocers 125, fish 67, fruit and vegetables 110, bread and flour 66, dining rooms 32, and other food shops 185.

The amount of unsound food detected is shown in the table below—all was voluntarily surrendered.

	Cwts.	Qrs.	Lbs.	Ozs.
Meat	3	1	21	1
Meat, canned	13	0	15	8
Fruit and Vegetables	1	0	23	0
Fruit and Vegetables, canned ...	15	0	4	1
Condensed Milk	12	1	15	10
Fish	—	—	8	0
Fish, canned	2	3	6	8
Miscellaneous	—	—	12	8

Food Factories.—There are fifteen factories in the town; they received 134 visits of inspection. Forty-one premises are now registered under the Bootle Corporation Act, 1921, as used for the preparation of potted or preserved foods.

Bakehouses.—There are 23 bakehouses (10 being underground), and 22 confectionery bakehouses. Four hundred and sixty visits of inspection were paid to them during the year; their general condition is good.

Sale of Food and Drugs Acts.—The Public Analyst is Mr. W. H. Roberts, M.Sc., F.I.C. Table 7 on page 69 shows that 195 samples were taken, of which 104 were milk. The reports show that 17 samples or 8·7 per cent., were adulterated or not up to standard. More than two-thirds of the samples were taken informally by purchase through an agent, and in cases where adulteration was detected a formal sample was then taken in order that the necessary legal action might be instituted; in 62 milk cases, however, the procedure prescribed by the Act was adopted.

Fifteen of the milk samples were reported on adversely by the Public Analyst. Of these, two were informal samples containing 14

per eent. and 5 per cent. of water; the vendors subsequently were eonvicted in respeet of four formal samples, and incurred fines and costs amounting to £18 14s. 0d. for selling milk which contained 16, 12, 10, and 5 per eent. of water respectively. Another vendor was summoned for having added 29 and 25 per eent. of water to milk on one day, and 22 and 19 per eent. of water on the following day. At the request of the defending solicitor, the magistrates allowed the withdrawal of one case for eaeh day, but inflieted fines and eosts totalling £14 4s. 0d. in the other two eases.

One was slightly defieient in fat; the vendor was eautioned. In two instances there were defieiencies of 10 and 8 per cent. of fat, and the remaining two eontained 6 and 3 per cent. of added water. Convietions were obtained under the Sale of Food and Drugs Acts in eight cases, the resulting fines and costs amounted to £40 2s. 0d.

Of the remaining seven, two were informal samples, two were withdrawn, two were not sufficiently adulterated to warrant proseeution, and one was dismissed as the magistrates who adjudieated were satisfied that the defendants had proved that the milk was "as it came from the eow."

Forty-nine of the milk samples were taken at the railway stations in the town, and of these eleven eontained 29, 25, 22, 19, 16, 14, 12, 10, 5, 5 and 2·5 per cent. of added water, respeetively.

The Public Analyst has kindly supplied me with the result of the analysis of every sample of milk submitted to him from Bootle, and it is interesting to note that, including the samples returned "not genuine," the average amount of fat was 3·61 per cent., and of non-fatty solids 8·62 per eent., the minimum standards fixed by the Board of Agriculture in the Sale of Milk Regulations, 1901, being 3 per cent. fat and 8·5 per eent. non-fatty solids, below which figures the milk is presumed to be not genuine.

Twelve samples of condensed milk were submitted to the Analyst, who certified that they were all genuine and correctly labelled as provided by the Publie Health (Condensed Milk) Regulations, 1923.

Forty samples of butter were taken for analysis, and all were found to be genuine.

One sample of lemon cheese was found to contain slightly more preservatives than allowed, but not sufficient to bring to the notice of the Court.

Public Health (Milk and Cream) Regulations.—One hundred and four samples of milk were examined under these Regulations for the presence of preservatives; none was found. Four samples of preserved cream were submitted for analysis, and three contained less, and one contained 0·06 per cent. more than the maximum amount of preservative allowed by the Regulations. The traders who supplied the latter sample were written to and their explanation of the slight excess was accepted.

V. PREVALENCE OF NOTIFIABLE DISEASES.

Zymotic Diseases.—During the year there were 96 deaths from the seven principal zymotic diseases, which are smallpox, measles, whooping cough, diphtheria, scarlet fever, diarrhoea, and fever (including typhoid, enteric, and typhus). This is a death-rate of 1·15 per 1,000 of the population; it compares with a decennial rate for 1915-1924 of 1·50.

The number of cases of infectious diseases notified during the year is briefly summarised below, and fuller detail is given in Table 3, page 62. There was no notification of smallpox, cholera, plague, relapsing or continued fever, or trench fever.

	Total Cases notified.	Cases admitted to hospital.	Total deaths.
Diphtheria	72	64	4
Scarlet Fever	155	116	5
Enteric Fever (including paratyphoid)	5	3	—
Puerperal Fever	6	6	1
Ophthalmia Neonatorum	37	2	—
Erysipelas	26	8	—
Encephalitis Lethargica	4	2	—
Cerebro-spinal Fever	2	—	—
Poliomyelitis	1	1	—
Infantile Diarrhoea (under two years)—voluntarily notifiable...	80	—	40
Malaria	5	1	—
Dysentery	1	1	—
Influenzal Pneumonia	6	—	—
Acute Primary Pneumonia ...	90	22	50
Tuberculosis—			
(a) Pulmonary	257	127	113
(b) Non-Pulmonary	62	10	19

Diagnosis of Infectious Disease.—On twelve occasions the Medical Officer of Health was asked by private practitioners to see, in consultation at their homes, cases in which the diagnosis of infectious disease was suspected. The instances in which an opinion was asked included suspected cases of encephalitis lethargica, typhus fever, scarlet fever, and diphtheria.

Scarlet Fever.—One hundred and fifty-five cases were notified, being a rate of 1·86 per 1,000 of the estimated population, compared with 3·9 in 1924. For several years since 1917 this town and its neighbours in South-Western Lancashire occupied unfavourable positions in the Registrar-General's Comparative Tables of Scarlet Fever Mortality, Bootle, indeed, having taken first place in 1921 and 1922. During 1923 the disease was of a milder type, and Bootle occupied a less prominent place in the national tables. During 1924, however, a severe type again prevailed, and caused seven deaths, a mortality rate of 0·08 per 1,000 of the population, as compared with 0·02 for England and Wales; this figure placed Bootle fifth in the list of county boroughs, in proximity to Warrington and Liverpool.

During 1925 the case incidence was remarkably low, but in accordance with past experience a proportion of the cases was severe, and five deaths resulted; the case mortality was therefore 3·2 per cent., and the death-rate per 1,000 of the population was 0·06 as compared with 0·03 for England and Wales.

In each of 12 houses two cases of scarlet fever occurred, and in each of two there were three cases.

Return Cases.—During 1925 there were two instances in which the discharge of a scarlet fever patient from hospital was followed by the occurrence of a new case in the home; this was equivalent to a return case rate of 1·7 per cent. of those discharged, as compared with 2·7 per cent. in 1924, and 3·1 in 1923.

The lengths of stay in hospital were 31 and 32 days, and the intervals between discharge and the commencement of the second case were 16 and 7 days, respectively. One case not removed to hospital was isolated at home for 37 days, and resulted in a "return" case 15 days after release from isolation.

Hospital Accommodation.—One hundred and sixteen, or 75 per cent. of the cases notified were treated in Linacre Hospital, with a

mortality rate, among the cases in which the diagnosis of scarlet fever was confirmed, of 5·4 per cent., as against the figure of 3·1 per cent. in the previous year.

Diphtheria.—The number of cases notified—72, as compared with 58 in 1924 and 86 in 1923, was well below the average of 115 for the ten years ended 1924. The incidence was 0·86 per 1,000 of the estimated population, and the case mortality was 5·6 per cent. Sixty-four cases, or 89 per cent. of those notified were removed to hospital. An examination of the four fatal cases, three of which suffered from laryngeal diphtheria, shows that one died on the reputed second day of the illness after three hours in hospital; the second died after two days' illness at home and two days after admission to hospital; the third died on the fourteenth day of the illness, after seven days in hospital; and the fourth died on the tenth day of the illness, after one day in hospital; Tracheotomy was performed in five cases.

In the cases of diphtheria patients nursed at home, antitoxin is supplied by the Authority.

The occurrence of a secondary case of diphtheria in an infected household was recorded on five occasions.

Smallpox.—Outbreaks of smallpox, mainly of a mild type, but resulting in more than five thousand cases, continued to arise in various parts of the Midlands and North of England during 1925, but no case occurred in Bootle.

According to information kindly supplied to me by the Clerk to the West Derby Union, 1,149 successful primary vaccinations and 7 successful re-vaccinations were performed during the year ended 30th September, 1925, as compared with the previous year's figures of 1802 and 34 respectively; this is a very regrettable drop from the experience of several years past during which more than 90 per cent. of the infants born received necessary protection.

Enteric Fever.—There were five notifications of enteric fever (including two of Para-typhoid "B" infection), one of which was a sailor who contracted the disease outside Bootle. The other cases occurred in Bootle residents, and no explanation of the origin of the infection could be obtained.

Influenza.—Six notifications of influenzal pneumonia were received, and eight deaths from influenza were recorded. Although the use of the

term "influenza" is not as strictly delimited as in the case of other infectious diseases, this low figure conforms with general opinion as to the absence, even of a mild type, of the influenza which in epidemic form visited the district in 1918, in 1919, and in the first quarter of 1922. The death-rate was equivalent to 0·10 per 1,000 as compared with 0·32 in England and Wales.

Measles. During 1925 measles caused 27 deaths, compared with 18 in 1924, and an average of 20 during the ten years ended 1924. The Bootle death-rate from this cause was 0·32 per 1,000, compared with 0·13 throughout England and Wales.

Complete information as to the incidence of measles is not now available, but during the year 247 cases occurring in school children were reported under the Bootle Corporation Act, 1920.

Whooping Cough.—Whooping cough caused 16 deaths during 1925. compared with 12 in 1924, and 14 in 1923. The death-rate was 0·19 per 1,000 of the population, compared with 0·15 throughout England and Wales.

Diarrhoea.—Deaths from this disease numbered 44, or a rate of 0·5 per 1,000 of the population as compared with 0·3 last year. Forty of the deaths occurred in children under the age of two years, giving a rate per 1,000 births of 20·6 in Bootle, as compared with 8·4 throughout England and Wales.

The arrangements instituted in previous years by which this disease is notifiable during the third quarter were continued, and 80 notifications were received, as compared with 23 in 1924, 47 in 1923, and 7 in 1922. The receipt of these notifications enabled instruction on the necessary sanitary precautions against the spread of infection to be given by the Infant Welfare Visitors, as well as nursing attention to be given by the Bootle District Nurses' Association ; the increase in cases is a reminder of the necessity for constantly teaching the elementary details of correct infant feeding.

LINACRE ISOLATION HOSPITAL.

Linacre Isolation Hospital, by arrangement with the respective authorities, receives cases of infectious disease from the urban districts of Litherland and Formby, as well as from the borough.

The year 1925 was exceptionally light as regards the working of the isolation hospital, even when compared with such favourable years as 1923 and 1924. The following table gives particulars of the cases admitted to the infectious disease wards, and shows a very large fall in the number of scarlet fever admissions. Particulars of cases in which the diagnosis was revised are given in Appendix 14 on page 79.

CASES TREATED IN THE INFECTIOUS DISEASE WARDS, LINACRE HOSPITAL.

DISEASE.	No. in hospital on 31st. December, 1924.				No. admitted during the year.				No. discharged during the year				No. died during the year.				No. remaining in hospital 31st. December 1925.			
	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total
Scarlet Fever.	11	2	—	13	93	13	4	110	92	14	4	110	5	—	—	5	7	1	—	8
Scarlet Fever complicated by other Disease.	—	—	—	—	11	—	—	11	7	—	—	7	2	—	—	2	2	—	—	2
Admitted as Scarlet Fever but diagnosis revised.	—	—	—	—	12	1	—	13	12	1	—	13	—	—	—	—	—	—	—	—
Diphtheria.	3	2	—	5	32	6	—	38	20	7	—	27	4	—	—	4	11	1	—	12
Diphtheria complicated by other disease.	—	—	—	—	2	—	—	2	2	—	—	2	—	—	—	—	—	—	—	—
Admitted as Diphtheria but diagnosis revised.	—	—	—	—	30	8	—	38	27	8	—	35	—	—	—	—	3	—	—	3
Other Diseases	1	—	—	1	10	1	—	11	9	—	—	9	1	1	—	2	1	—	—	1
TOTALS	15	4	—	19	190	29	4	223	169	30	4	203	12	1	—	13	24	2	—	26

Tracheotomy.—Tracheotomy was performed on five cases for laryngeal diphtheria; two recovered.

Cross-infection.—The hospital was again fortunate in respect of the amount of cross-infection, or the contraction of a second disease by a patient admitted for one disease only. When it is recognised, however, that a patient admitted for, say, scarlet fever may happen to be incubating a second disease such as chicken-pox or measles, or may be the victim of an unavoidable error of diagnosis, it will be seen that the actual amount of cross-infection of other occupants of the ward cannot be strictly limited. One case notified as scarlet fever, and not actually suffering therefrom at the time of admission, subsequently developed it.

Diphtheria Susceptibility and Immunisation.—Further observations with the Schick test were made during the year; this reaction, which indicates whether or not the individual is susceptible to diphtheria, was made use of in the case of 87 of the scarlet fever admissions, and the following table brings out the fact that fewer susceptible children are discovered as the age period advances, owing either to the gradual immunisation produced in town children by repeated exposure to small doses of infection or to the contraction of actual attacks of diphtheria.

SCHICK TESTS.

PATIENTS IN SCARLET FEVER WARDS.

Ages.	Positive.	Negative.	Total.
Under 5 years ...	15	4	19
5—10 ,, ...	18	25	43
10—15 ,, ...	5	11	16
15—20 ,, ...	2	2	4
20 years and over ...	1	4	5
Total ...	41	46	87

The Schick test was also applied to new probationer nurses either before or as soon as possible after their engagement, and it was found that one of the seven gave a positive reaction indicating susceptibility; this nurse was subsequently protected by an injection of toxin-antitoxin. The utility of this procedure, which was commenced in 1923, is obvious from the point of view of the nurse, as well as of the hospital administrator, who in the past has been faced with the difficulty of members of the staff contracting a dangerous infectious disease during the execution of their duty.

Staff Sickness.—The health of the staff was generally good. One nurse contracted acute rheumatism and was off duty for 48 days; a second nurse lost 4 days from tonsillitis, and a maid lost 9 days from the same cause.

Bacteriological Laboratory Work.—

Examination required.	Positive result.	Negative result.	No. of Specimens examined.
Swabs for Diphtheria ...	64	845	909
Sputa for Tubercle Bacilli	191	484	675
Others	1	1	2
	256	1330	1586

In addition, 36 samples of milk, ten specimens for report as to typhoid infection, 233 specimens for venereal disease, three for diphtheria virulence, three for cerebro-spinal fluid, and three miscellaneous specimens, were examined by Professor Beattie in the Pathological Department of the Liverpool University.

VI. TUBERCULOSIS.

Deaths.—The number of deaths caused by tuberculosis during 1925 was 132, or one death in every eight, giving a death-rate from this cause of 1·8 per 1,000 of the population, as compared with 1·4 in 1924 and 1·7 in 1923; it was 1·8 for the ten years ended 1924.

The tabular statement which follows demonstrates a set-back in the improvement in the tuberculosis death-rate since the war period, and shows that the borough, in common with neighbouring areas, has a marked excess in tuberculosis incidence over the country generally.

TUBERCULOSIS (ALL FORMS).

	BOOTLE			Death-rates in England and Wales.
Year.	Cases notified.	Deaths.	Death-rates.	
1913 ...	375	120	1·6	1·34
1914 ...	325	113	1·5	1·35
1915 ...	319	143	2·0	1·55
1916 ...	324	179	2·3	1·62
1917 ...	267	151	1·9	1·80
1918 ...	228	160	2·2	1·92
1919 ...	203	110	1·4	1·26
1920 ...	216	128	1·6	1·13
1921 ...	299	140	1·8	1·12
1922 ...	284	130	1·6	1·12
1923 ...	302	135	1.7	1·07
1924 ...	302	115	1·4	1·06
1925 ...	319	132	1·8	

Incidence by Age and Sex—The table below shows that the pulmonary form of the disease is by far the more fatal; that it is commoner in males than in females; and that it is of greater economic importance in that it attacks its subject during the working years of the life-period—it will be seen in this regard that two-thirds of the cases and four-fifths of the deaths from pulmonary tuberculosis occurred between the ages of 20 and 55 years. On the other hand in non-pulmonary tuberculosis two-thirds of the cases and one-half of the deaths occurred in children below the age of fifteen years.

TUBERCULOSIS.—Age and Sex Incidence.

AGE PERIODS	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 Year	—	—	1	3	—	—	1	2
1— 5 Years	3	1	5	3	2	1	5	—
4—10 ,,	9	6	4	9	—	—	1	—
10—15 ,,	5	7	4	10	2	1	—	1
15—20 ,,	14	15	5	6	4	6	1	3
20-25 ,,	13	21	1	5	10	4	—	1
25—35 ,,	24	26	1	1	16	9	—	1
35—45 ,,	27	15	1	1	13	11	2	—
45—55 ,,	28	15	1	—	16	6	—	—
55—65 ,,	11	2	—	—	3	2	—	—
65 and upwards	12	3	—	1	5	2	—	1
Totals	146	111	23	39	71	42	10	9

PULMONARY TUBERCULOSIS.

Incidence.—Two hundred and fifty-seven new cases were notified during the year to be suffering from pulmonary tuberculosis, of whom 6 were ex-Service men. The age and sex distribution of the patients will be found on page 70. The numbers notified in the three preceding years were 168, 236, and 217, respectively. In the case of sixteen the first intimation was obtained from the death returns, while in 28 other cases notification was made at intervals of less than three months before death. The non-notified deaths, therefore, numbered 13 per cent. of the total of 113 deaths from pulmonary tuberculosis. Enquiry into these non-notified cases showed the omission to be on the part of private doctors in nine instances, and on the part of the medical officers of large Poor Law institutions, asylums or sanatoria in the remainder.

Deaths.—During the year 113 deaths were certified to be due to pulmonary tuberculosis, representing a rate of 1·36 per 1,000 of the population, as compared with 1·15 in 1924, and 1·3 in 1923.

Tuberculosis Visitors: Home Visitation—Three tuberculosis visitors, one of whom assists in the medical work of the Dispensary, and two of whom are engaged also on work in connection with Maternity and Child Welfare, are responsible for the sanitary supervision of the homes of notified and suspected cases; they paid 2,192 visits to the homes of the 1,332 persons suffering from pulmonary tuberculosis in Bootle. During the year 92 cases died, 286 new cases were added, and 49 were discharged or left the district; 1,191 were on the books at the end of December.

Tuberculosis Dispensary.—Attention continued to be paid to securing the attendance for examination of contacts of notified cases, and during the year 175 were so examined. As a result, 16 were pronounced to be definitely suffering from tuberculosis, 12 were still under observation at the end of the year, 11 ceased attendance before diagnosis was made, while the remaining 136 were considered to be non-tuberculous.

During the year 244 new cases, of whom 80 were sent by private practitioners and 42 by the School Medical Officer for opinion preliminary to notification, were examined at the Dispensary; 152 were diagnosed as suffering from tuberculosis, 24 were still under observation at the end of the year, 16 cases ceased attending before a diagnosis was

made, and 52 were considered to be definitely non-tuberculous. The total attendances at the Dispensary during the year numbered 5,778, as compared with 5,776 in 1924; 363 specimens of sputum were examined, giving a positive result in 44 cases.

In pursuance of the policy adopted during the last two or three years, all cases not at the time in need of specialist supervision or treatment (sanatorium, hospital, X-ray, etc.) are referred to their own doctor; such a policy is easy in respect of the insured population, but cannot be followed as safely with the remainder owing to their lack of means. During the year 51 insured patients were referred to their panel doctor for treatment, and touch was kept with them by means of the insurance practitioners' quarterly reports and through the medium of the Tuberculosis Visitor; 248 report forms (G.P. 17) were sent out, and 163 were returned completed. Every effort is made to establish a diagnosis as soon as possible in each case, and of 903 patients in attendance at the Dispensary at the end of the year, only 36 were entered as under observation pending diagnosis, ten of whom had been so classified for periods longer than two months.

The Dispensary has no X-ray apparatus, but during the year twelve cases were sent by arrangement to the Lancashire County Council's Tuberculosis Dispensary at Seaforth for radiographic examination and report.

Maghull Sanatorium.—During the year 66 patients were admitted to the Institution with an average length of stay of 99 days for the cases discharged during the year. During the year ended 30th September, 1925, 53 patients were discharged, and of these 36 were known to be fit for work in December, 1925. The tables presented in previous years, indicating the condition of all patients who had passed through the Sanatorium since its opening in May, 1914, have been brought up-to-date, and in brief show that of 555 cases discharged before September, 1924, 189 were known to be fit for work in December, 1925, while of 140 of the above cases in which tubercle bacilli had been found in the sputum, 51 were known to be fit for work in December, 1925. These 51 sputum-positive cases include three who had been discharged twelve years, 3 discharged eleven years, 4 discharged ten years, 6 discharged nine years, 5 discharged eight years, 10 discharged seven years, 6 discharged six years, and 5 discharged five years previously.

Linacre Hospital Tuberculosis Pavilion.—During 1925, 61 Bootle cases were admitted to the pavilion, the average length of stay of the 66 cases discharged during the year being 98 days. Eight Lancashire County Council cases and one private case were admitted. There were in all 13 deaths in the tuberculosis wards during the year.

Artificial Pneumothorax Treatment.—The principle underlying artificial pneumothorax treatment is to obtain collapse of the affected lung by injecting air or nitrogen into the pleural cavity between the chest-wall and the lung, the collapse securing rest of the diseased part and a consequent possibility of healing.

The treatment has been attempted in six cases at Linacre Hospital. In all cases tubercle bacilli were present in the sputum, and the treatment was controlled by periodical X-Ray examination.

In two chronic cases in which signs of disease were almost limited to one side, no free pleural space could be found even after several punctures, and the attempt at treatment had to be abandoned. In a third case of similar type to the above a small free pleural space was found and 300 c.c. of gas entered under pressure; attempts to enlarge the pneumothorax using pressures of 20 to 30 mms. failed, and the treatment was given up; the case died eight months afterwards. In a fourth case one puncture was made and 300 c.c. entered; two days afterwards the patient had a severe haemoptysis which recurred, and she died one week after the treatment.

In two cases with hectic temperature and signs more extensive in, though not confined to, one lung a complete pneumothorax was obtained. In both it was allowed to absorb to a partial pneumothorax, kept up at about atmospheric pressure, or a little below it, as the patient appeared to do better thus than with complete pneumothorax. In one of these the patient, after pneumothorax had been maintained for a year, wanted to discontinue the treatment, "as he felt well"; he has been working full time ever since (one year ago), the disease being apparently now non-progressive, although not quiescent. The other is still under treatment, pneumothorax having been maintained now for seven months; sputum has become very slight and several recent examinations show no tubercle bacilli; weight has increased, general condition has improved, and temperature has been normal ever since the beginning of the treatment.

Dental Treatment.—The scheme for the provision of dental treatment in cases recommended by the Tuberculosis Officer has been continued, and in all 6 cases completed treatment during the year, and 3 were carried forward to 1926. The approximate cost of this treatment was £17 13s. 0d., of which the patients' contributions were assessed at £2 15s. 0d.

Ex-Service Patients.—Six ex-Service patients came under treatment in 1925, 1 died, 2 received dispensary treatment, and 3 were admitted to institutions. During the year 634 visits were paid to the homes of the 127 ex-Service patients, who are, or were, under supervision.

NON-PULMONARY TUBERCULOSIS.

During the year 63 new cases of non-pulmonary tuberculosis were notified, as compared with 85 during 1924, namely:—22 glands, 11 bones and joints, 15 abdominal, 6 meningitis, 3 spine, 3 cases of lupus, and 2 of epididymitis;. and there were 19 deaths registered. The agreement with the Leasowe Hospital for Children for the maintenance of six beds for children suffering from non-pulmonary tuberculosis remained in force, and 7 cases were admitted during the year in place of other 7 discharged.

The scheme for admission to local general hospitals of adult cases of non-pulmonary tuberculosis, and for payment by the Council of the charges for maintenance and treatment in cases recommended or approved by the Tuberculosis Officer, was continued. During the year six such patients have been admitted to the Stanley Hospital, three to the David Lewis Northern Hospital, and one to the Liverpool Skin and Cancer Hospital; three of these were recommended by the Tuberculosis Officer, and seven were subsequently approved by him after admission as urgent cases.

ARTIFICIAL LIGHT TREATMENT.

Artificial light treatment, confined to exposure of patients to general irradiation, was commenced at Linacre Hospital on the 5th October, 1925. Three carbon-arc lamps, wired in parallel, are employed; the voltage across the arcs is 75 to 90 and the current is 25 amperes per arc; an auto-transformer is provided to step down the main supply. The transformer input is 230 volts 50 cycles, and the output 75, 80,

85, 90 or 95 volts, as required; the input current is 35 amperes, output 75—that is, 25 amperes per lamp. The current used is alternating.

The plant was installed in one half of Pavilion V. which had been out of use since the transfer of tuberculosis cases to the newly constructed Pavilion VII. in 1922.

One of the general wards made a suitable dressing room for patients; a duty-room, though small, proved adaptable to the purposes of the light treatment room, and the ward bathroom was available for sponging-down or shower-bathing after treatment.

The nursing staff employed consists of a Sister in charge of the Pavilion for advanced Tuberculosis and her Staff Nurse and a nursing probationer; one person on duty is sufficient to work the clinic.

Treatment was commenced with five patients on the 5th October, 1925, and up to the end of the calendar year 20 patients in all received treatment; none was discharged, although one ceased attendance after four exposures. The ordinary routine of treatment of babies has been to give a first exposure of 15 minutes, increasing by five minutes to 30 or 40 minutes, given on alternate days; with older children or adults the first exposure has been 20 minutes, quickly increased to 45 minutes or an hour. Departure from the ordinary routine was necessary on two occasions, in the case of one man who had a very intense reaction, and in the case of a child who developed conjunctivitis.

Five of the patients were infants under the age of two years suffering from rickets. No infant had received more than 11 exposures by the 31st December, and, although there were very satisfactory reports from the mothers as to improvement in sleeping and feeding, sufficient time had not elapsed to warrant an expression of opinion as to permanent improvement. The other 15 patients were cases of tuberculosis; non-pulmonary in all instances but one, which was a case of malnutrition in a child who had formerly suffered from pulmonary tuberculosis; there were 6 cases of tubercular glands, 3 cases of tubercular bone disease, and 1 of epididymitis, the remainder being other cases of surgical tuberculosis.

Light treatment of these cases was commenced at various dates between 5th October and 31st December and, accordingly, it is not possible to note any cures during the period under report. Since then,

however, the treatment of two cases of glandular tuberculosis, one case of tuberculosis of the mastoid bone, and one case of tuberculosis of the sacrum, all with discharging sinuses, has had very satisfactory results, the sinuses having healed and the disease having been arrested in each instance. The case of tuberculosis of the sacrum is particularly interesting in that the youth first came under the notice of the Tuberculosis Officer in January, 1923, with a large abscess above his sacrum. This was operated upon at a general hospital, and after intervals of treatment there and by a private doctor the patient was admitted in July, 1924, to the tuberculosis wards at Linacre Hospital. He remained an in-patient with persistent discharge from the operation wound over his sacrum, receiving ordinary routine and symptomatic treatment until the 27th October, when general irradiation with artificial light was commenced. By the end of January, 1926, he had received 30 exposures each of about 45 minutes' duration on alternate days, and the discharging sinus had then completely healed. The patient's general health was excellent, and he was discharged from hospital in February, 1926.

Temperatures and pulse rates are taken of each patient before and after treatment, and fortnightly records of weight are made; nothing of note has emerged from these observations.

The production of erythema in the cases under review was variable and was noted to be marked in only five cases, and the pigmentation to be deep in seven.

No separate meter has yet been installed to measure the electricity consumption of the plant, and the theoretical amount of 17 units per hour appears to exceed the consumption calculated from the usual periodical readings of the general meter. The six carbons in the three lamps cost 10/- per set of six and are found to burn for about six hours, and assuming a consumption of 17 units per hour the total running costs are 7/10½d. per hour, during which eight or ten patients can receive treatment.

Cost.—The total approximate net expenditure, after deducting receipts of grants-in-aid, on the prevention, diagnosis, and treatment of tuberculosis during the financial year 1925-26 was £3,234, and the corresponding amount for 1926-27 is estimated to be £3,321.

VII. VENEREAL DISEASES.

The Council's scheme for diagnosis and treatment of venereal diseases through the treatment centre at the Bootle Borough Hospital was continued as in previous years, and three clinics were held weekly for men and three for women and children.

The Annual Statistical Report of the Medical Officer of the Treatment Centre will be found on page 76. It shows 220 persons under treatment on the 1st January, 1926, practically the same number as on the 1st January, 1925, and a decrease in the number of new cases, the figures being 330 as contrasted with 410 in 1924, and 360 in 1923. This decrease is, however, more apparent than real, and arises out of a new classification of returning patients who had been marked off in previous years as having ceased to attend; formerly any such cases would have been classified as new cases; and if the 50 and 94 returned patients suffering from syphilis and gonorrhoea respectively are added to this year's "new cases," the resulting total of 474 shows an increase instead of a decrease.

The total attendances for treatment made at the clinic during the year show an increase from 5,674 to 6,620; the figure includes 2,390 attendances made between clinic days for the treatment of gonorrhoea at the irrigation centre. In-patient days totalled 443, as contrasted with 751 during the previous year. During 1925, 190 cases were discharged after completion of treatment and observation, as contrasted with 190 during 1924.

The table below is a statement of the number of cases presenting themselves for treatment since the establishment of the clinic; as noted above, however, this year's figures being compiled on a somewhat different basis, the results are not strictly comparable.

BOOTLE VENEREAL DISEASES CLINIC.

Years :—	1919.	1920.	1921.	1922.	1923.	1924.	1925.
New cases (total)	597	495	400	367	360	410	330
New cases (syphilis)	245	225	200	183	186	160	92
Total attendances (excluding Irrigation Department)	4827	5099	4448	4070	3955	4628	4230
Irrigation Department attendances	—	—	785	976	838	1046	2390
In-patient days	502	309	335	487	289	751	443
No. discharged after completion of observation and treatment	177	217	142	136	144	190	135

An examination of the cases discontinuing attendance before the condition had been with certainty rendered non-infectious shows that 111 ceased attendance before completion of treatment, and that 91 ceased attendance after completion of treatment but before final tests as to cure; the inference from the former figure is that one patient in five remained a source of potential danger to the public health.

Bootle residents accounted for one half of the cases under treatment at the Borough Hospital Centre, and for three-quarters of the attendances, the Authorities contributing the next largest number of cases being the Lancashire County Council and Liverpool, which together made up a total of one-third.

Educational propaganda work was continued throughout the year by the Merseyside Boroughs Venereal Diseases Education Committee, consisting of representatives of the Health Committees of the four Merseyside Boroughs with their respective Medical Officers of Health. Under the auspices of this organisation films were exhibited and addresses were given at various centres by medical speakers.

Cost.—The total approximate expenditure on the prevention, diagnosis, and treatment of venereal diseases during the financial year 1925-26 was £1,927, and it is estimated that during 1926-27 the cost will be £1,915; 75 per cent. of these sums will be recoverable from the Ministry of Health.

VIII. MATERNITY AND CHILD WELFARE.

Midwives Acts, 1902-1918—The number of midwives on the local roll is 28 as against 31 in the preceding year; 9 others, resident outside the district, have given notice of their intention to practise in the borough; all are trained. To the above figures may be added eight midwives practising in local Maternity Homes.

Minor irregularities in the observance of the rules of the Central Midwives Board have been under consideration on several occasions during the year, and appropriate action has been taken. Further, one certified midwife who had been placed on the Midwives Roll in 1903 as having been previously in *bona fide* practice as a midwife, was guilty of neglect to notify a case of ophthalmia neonatorum; the case was not discovered until the child was 15 days old when the condition of the

eyes was so bad that immediate admission to St. Paul's Eye Hospital was arranged. In spite of the skill and attention there available, the sight of one eye was completely lost, and the sight of the other was badly impaired. The facts were investigated by the Local Supervising Authority, who reported their finding of a *prima facie* case of negligence to the Central Midwives' Board. The Board at their next penal sitting formally enquired into the case, found the midwife guilty of the charge, and removed her name from the Midwives' Roll in September, 1925.

Regulations of the Central Midwives' Board require medical help to be sought by the midwife in all cases of illness of the patient, or the child, or of any abnormality occurring during pregnancy, labour, or lying-in, and 336 records of sending for medical help were received. Eleven of the calls were on account of abnormalities during pregnancy, 223 during labour, 31 during the puerperal period, and 71 for conditions affecting the child.

Under the 1918 Act the Local Supervising Authority is responsible for the payment of fees to doctors called in by midwives, and with the continuance of unemployment in the town the number of such accounts received, in respect of cases where the doctor himself was unable to recover the fee, remained high; 182 accounts, totalling £256 12s. 0d., were sent in, as compared with 173 accounts, totalling £275 8s. 6d., in 1924. In respect of this sum, the contributions to be recovered from the patients were assessed at £92 16s. 9d.

Payment of Midwives' Fees.—As from 1st April, 1922, the Council took over from the Health Society the responsibility for the payment of midwives' fees in approved necessitous cases. Applications in respect of this service are considered with full information as to the family income and outgoings, and are granted only on satisfactory evidence that the applicant is not entitled to maternity benefit under the National Insurance Acts. During the year 20 applications were received and 14 were granted.

Puerperal Infection and Mortality.—Six cases of puerperal fever were notified, and one death from that cause was registered. In each case delivery had been completed by the midwife in attendance, and in two instances the infection occurred in the practice of a midwife living outside the district, who was understood to have had other cases of infection about the same time. Other four cases of death during

pregnancy or parturition occurred, the causes of death being registered respectively as (1) Cardiac failure, accidental haemorrhage in child-birth; (2) Eclampsia; (3) Toxaemia of pregnancy; and (4) Operation for post abortion, retroversion of uterus, intestinal obstruction.

The five deaths thus resulting from or in connection with child-birth give a rate of one maternal death for every 389 births, compared with one for every 194 in 1924, and one for every 500 in 1923.

Milk Assistance Scheme.—The Council's Milk Assistance Scheme, under which dried milk is granted on the Clinic Medical Officer's recommendation to infants, and to expectant and nursing mothers, in necessitous cases falling within a certain income scale, continued in force; it was supplemented to some extent by similar grants from the Bootle Health Society to necessitous cases which the Municipal Scheme was unable to help. In all, milk to the value of £332 17s. 6d. was granted by the Council to infants under 12 months of age and to nursing and expectant mothers, on the advice of the Medical Officer, as compared with £299 1s. 1d. during 1924, and £243 17s. 10d. during 1923. The allocation of £350 for this purpose allows of grants of one pound of dried milk weekly to about 90 of the 1,900 babies under the age of one year.

Ante-Natal Clinics.—The very gratifying progress recorded in the last three Annual Reports in connection with this branch of Maternity Welfare work has been maintained during the year under review. In 1920 the number of new cases presenting themselves for examination and advice was 180, or 8 per cent. of the total number of births, while during 1925 the number of new cases was 444 or 23 per cent. of the total births; in other words one expectant mother in every four attended for consultation, thus placing the Ante-Natal Clinics of the town on the same relative footing of public appreciation as the Infant Consultations in 1919.

All women in their first pregnancy, all who have had previous miscarriages or difficult labours, and expectant mothers suffering from any abnormality during pregnancy should seek skilled medical advice with a view to the appropriate treatment being obtained before an emergency has arisen.

A two-fold purpose is kept in mind in the conduct of this ante-natal welfare work which, it is gratifying to note, has received the hearty

support of most of the practising midwives of the town. In the first place, it is obvious that the confidence of the expectant mother must be gained and kept, not only by advice as to the hygiene of pregnancy, but by affording treatment to the various minor ailments and inconveniences arising out of inability completely to live up to the ideals indicated; from this same standpoint of care for the maternal health a look-out is kept for conditions likely to cause difficulty at the confinement. Then, closely linked up with these objects, and likely to succeed *pro rata* with their attainment, is the attempt to reduce the number of stillbirths and the number of infantile deaths during the first month after birth, which have both remained almost stationary for the last twenty years. It is not contended that conditions calling for interference on either count are met with in the majority of cases presenting themselves for advice, but both Clinics have amongst this year's cases instances of disproportion between the size of the child and of the maternal parts calling for Caesarian section, cases of albuminuria, of unsuspected venereal disease, and of threatened miscarriage. The close association maintained between the Clinics and the Maternity Home and, through the Consulting Gynaecologist, with the Liverpool special hospitals, adds much to the usefulness of both clinic and institution.

Dental Treatment of Expectant and Nursing Mothers.—The work has been in the nature of extractions, fillings and the supply of artificial teeth, and during the year 52 cases were treated, at an estimated cost of £58 15s. 0d., of which the patients' contributions were assessed at £11 15s. 0d.

The experience of the reduction in sickness claims received by Approved Societies which have instituted dental benefit for their members is in full accord with local knowledge of the advantages to be derived from a continuance of this scheme, and indeed from an extension of dental treatment to the adult population in general.

Maternity Home.—During the year 128 patients were admitted to the Maternity Home, the average duration of stay being 14·7 days. Nine cases were admitted for ante-natal treatment, 101 cases were delivered by the nursing staff, 17 cases were delivered by doctors, and one case was transferred to a Liverpool Hospital for Caesarian section. Medical assistance was called by the Matron on one occasion for ante-natal conditions, on 19 occasions during labour, four times for conditions after labour, and three times on account of debility of the infant.

The medical or obstetric indications for admission included:—

Disproportion between pelvis and foetal head ...	4
Albuminuria	3
Threatened eclampsia	1
Previous stillbirths	1
Pneumonia and threatened miscarriage ...	1
Prolapsus uteri	1

There was one case of ophthalmia neonatorum, which was transferred to the Liverpool Eye Hospital, and was subsequently discharged cured. All the patients but three left the institution with their babies being breast-fed, the exceptions being cases of mastitis.

Only on four occasions did the temperature rise above 100·4° for 24 hours with rise of pulse rate, the causes being mastitis in three cases, and retention of a portion of membrane in the fourth. There were no maternal deaths. There were six foetal deaths (still-born or within ten days of birth), three in which the child was still-born, and three in which the infant died from debility.

The reduction in March, 1925, of the standard fee for a fortnight's nursing and maintenance from six to four guineas was followed by a steady increase in the number of bookings, with the result that the total admissions for the twelve months ended 31st March, 1926, have numbered 156, an increase of 49 over the previous financial year. These additional patients were accommodated at a small additional cost for food, laundry, etc., and as the income from patients' payments was practically the same in each year, the Council was in the satisfactory position of having given excellent midwifery service to 49 more people at a nominal cost.

The approximate gross cost of the Home in the twelve months ended 31st March, 1926, is estimated to be £1,646, and the net cost to the rates (after deducting patients' contributions, etc., of approximately £480 and Exchequer grant) to be £583.

INFANT WELFARE.

Notification of Births Acts.—The number of births notified under these Acts was 1,775 or 91·4 per cent. of those registered; 1,721 notifications were received from midwives, and 54 from doctors; 199 notifications of live-birth and 4 of still-birth were also received of births to parents who normally resided elsewhere.

The babies were visited shortly after birth by the Infant Welfare Visitors, unless it was considered that suitable adviee could be obtained from other sourees. A summary of the work of the Infant Welfare Visitors is given on page 78.

Births Registered.—The number of births registered in the distriet was 2,077, from which 252 are to be deducted as born in Bootle to residents of other districts, and to whieh are to be added 118 births to Bootle parents temporarily out of the town; the eorrected figure is therefore 1,943. Of the number registered 74 were illegitimate.

Still-births.—Still-births numbered 47, as compared with 53 during 1924, and 76 during 1923. As full an investigation as possible has been obtained in respeet of eaeh sueh ease, and 9 of the foetuses were forwarded for pathologieal examination.

Infant Deaths.—There were 188 deaths of infants under the age of twelve months, which, expressed as a rate per 1,000 births, gives an infant mortality rate of 97, eompared with 99 during 1924, 85 during 1923, and an average of 102 in the decennium 1915-1924.

The trend of infant mortality in recent years is set out in the table below:—

Years.	Bootle.	England and Wales.
1901-05	166 ...	138
1906-10	130 ...	117
1911-15	133 ...	110
1916-20	103 ...	91
1921	96 ...	83
1922	80 ...	77
1923	85 ...	69
1924	99 ...	75
1925	97 ...	75

There was less difference in the ineidenee of infant deaths in the various wards than in previous years, the approximate rates varying from 109 in Derby, 108 in Mersey, 107 in Stanley, 104 in Knowsley, down to 79 in Orrell and 73 in Linaere.

The rate of infantile mortality amongst legitimate infants was 94 per 1,000 births, and amongst the illegitimate it was 162. The more important of the causes of death, which are given in detail on page 00,

were prematurity 33, bronchitis and pneumonia 48, atrophy, debility, and marasmus 24, and diarrhoea and enteritis 30.

Preventability of Infant Deaths.—An examination of the causes of the 188 infant deaths in Bootle last year is helpful in attempting to estimate what proportion of the deaths could be prevented if the knowledge we at present possess was in every case made use of. Such examination shows that 36 infants died in their first week, 19 of them due to premature birth, and the remainder to congenital conditions so impairing vitality as to make survival difficult or impossible however great the care which the infant received. Further, the same conditions of premature birth or impaired vitality accounted for other 19 deaths of infants under four weeks old, and it is possible that nine or ten of these would have succumbed however careful their nurture. The next most fruitful cause of death was pneumonia and bronchitis, which killed 48 infants under the age of one year, and a knowledge of the family circumstances in these cases leads one to think that the exercise of intelligent care would have prevented the onset of the illness in a number of these instances, or would have determined a favourable issue of the disease when once contracted; and an allowance of 24 as the number of inevitable deaths from this set of diseases is a generous one. Similarly, 30 infants are noted as having died from enteritis or diarrhoea, and again there is no doubt that a large proportion of the cases represents instances of bad mothering, and that ten deaths annually due to these causes is the outside figure which need be accepted as unavoidable. Looking down the rest of the table one finds 7 deaths due to whooping cough, 5 due to measles, 8 due to convulsions, and 2 due to tubercular infections, all conditions which in theory are preventable although not in fact prevented.

Such an analysis, combined with a knowledge of the infantile mortality statistics of other nationalities, and of special classes of the community in our own country, indicates that an infantile mortality rate of 40 or 50 per 1,000 is attainable, given the exercise of knowledge which is at present available; and the everyday task of the Health Department is to get this knowledge home to the mother at the time when she is able to take advantage of it, and day in and day out to hammer away at the elementary essentials underlying infant health, viz.:—regular feeding with maternal breast milk, warm light clothing, and strict cleanliness.

Neo-Natal Mortality.—Thirty-six children died before they were a week old, and a total of 66, or 35 per cent., of all the deaths under one year occurred in children under the age of one month. This is a neo-natal mortality rate of 34 per 1,000 births, and, as the table below shows, represents a stationary condition of affairs over the last twenty-five years:—

Death-Rates per 1,000 Births, of Infants under Four Weeks.

Year	Deaths per 1000 Births	Year	Deaths per 1000 Births	Year	Deaths per 1000 Births	Year	Deaths per 1000 Births
1905	41·4	1910	43·2	1915	31·7	1920	35·8
1906	37·3	1911	49·1	1916	29·4	1921	36·3
1907	36·9	1912	40·4	1917	29·4	1922	31·7
1908	37·2	1913	40·6	1918	31·5	1923	35·0
1909	30·5	1914	34·4	1919	35·5	1924	34·0
Quinquennial Average = 36·7		Quinquennial Average = 41·5		Quinquennial Average = 31·5		Quinquennial Average = 34·6	

Ophthalmia Neonatorum.—Thirty-seven cases were notified during the year, compared with 34 in 1924, 31 in 1923, and 35 in 1922, the rates per 1,000 births being 19·0 for 1925- and 17·5 for 1924. The disposition of the cases and the results are shown in the table below:—

Cases.			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths.
Notified.	Treated.					
	At Home.	In Hospital.				
37	36	1	36	1	—	—

Health Visiting Staff.—At the commencement of the year the Health Visiting Staff stood at the equivalent of four whole-time visitors, five actually being engaged in the work, but two of them devoting

half their time to tuberculosis visiting. In February, 1923, the Ministry of Health expressed the opinion, formed after inspection by their officers, that the staff was inadequate for the work to be done, and on several occasions subsequent to that date the Council gave consideration to the appointment of an additional Visitor. An opportunity presented itself in the middle of the year, when the Education Committee resolved to establish an additional daily clinic for the treatment of minor ailments in school children, and required for that purpose the part-time services of an additional School Nurse, for a whole-time appointment to be made, and for the Maternity and Child Welfare Committee to obtain three-quarters of the time of the newly-appointed nurse. Accordingly, as from October, 1925, the Health Visiting Staff was proportionately strengthened, and it is hoped, although part of the time of the new officer must necessarily be spent in improving the conduct of the Health Society's clinics, to devote a little more time in future to the important work of advising on infant health in the mother's own home. As it was, the staff available during 1925 allowed on the average of the payment of only three visits to each infant under one year, three visits to each two infants in their second year, and rather less than one visit to each child between the ages of 2 and 5 years. As has been pointed out in previous Annual Reports, the children of this last age group necessarily receive a smaller share of the mother's attention, though it is obvious that unsuitable feeding, clothing, and personal habits in the "toddler" stage constitute the causes of the defects in nutrition and general health which call for the services of the School Medical staff when the child commences school life.

A statistical presentation of the work of the Infant Welfare Visitors is given on page 78; it will be seen that 17,920 visits were paid, of which 8,490 were devoted to infants under the age of twelve months.

Infant Welfare Clinics.—Since 1920 an Infant Consultation has been held once weekly in each of the three centres maintained by the Bootle Health Society, and the steady increase in their popularity had caused such inconvenience at the clinics that it was no surprise to find the Ministry of Health commenting in February, 1923, on the need for additional sessions at the Infant Welfare Centres. Consideration was given by the Council at intervals to the possibility of starting additional infant clinics, but it was not until October, 1925, that a favourable decision was arrived at, and one additional weekly consulta-

tion was established. By that time, not only was the medical efficiency of the clinics impaired, but the large numbers in attendance had made the waiting-room accommodation inadequate, and had led to working difficulties in the weighing of infants and in the sale of dried milk.

It is probably for the above reasons that for the first time a decrease has to be reported in the number of new infants presented for examination and advice; this figure for 1925 was 869, as compared with 957 in 1924 and 919 in 1923; the total attendances throughout the year showed a decrease to 14,539 as compared with 16,484 in 1924 and 13,783 in 1923. The average attendance at each meeting was 104 at St. Matthew's Hall, 92 at the School Medical Offices, and 89 at the Marsh Lane Clinic.

Various considerations led to the sanctioned additional Infant Consultation being held on Wednesday mornings at the School Medical Offices, and although this is an inconvenient time from the average mother's point of view, the Clinic at the time of reporting has secured an average attendance of 30 infants each week. This number makes it possible for the Medical Officer to extend his advice beyond the matter of feeding, important as it is, to other questions of personal hygiene, errors in which are still reflected in the infant mortality statistics.

The Sewing Classes held in connection with the Balliol Road and Marsh Lane Clinics continued their excellent work in giving instruction and help in the making up of infants' clothing. As has been said before, a large extension of this work is desirable, as inculcating self-help in a direction likely to lead to improvement of the health and comfort of infants and young children.

Cost.—The net cost of all the above Maternity and Child Welfare Services during the financial year 1925-26 was £3,416 approximately; the estimated net expenditure during 1926-27 is £3,669; 50 per cent. of these sums will be recoverable in grant from the Ministry of Health.

Bootle Health Society.—Gratitude is again expressed to this voluntary Society for its helpful co-operation with the Health Department in the work of promoting maternity and child welfare. The Health Society supplies the non-professional workers at each of the six clinics held weekly throughout the year; is entirely responsible for the conduct of

the Sewing Classes; and helps necessitous cases by the loan of maternity bags, the provision of fireguards, and by the gift of dried milk in cases not eligible under the Council's milk assistance scheme.

IX. PUBLIC HEALTH EDUCATION.

Formal public health education is the latest departmental activity, and its conduct here, as elsewhere, during the last few years received State endorsement in the Public Health Act, 1925, which empowers Local Authorities to arrange for the publication within their areas of information on questions relating to health or disease, and for the delivery of lectures and the display of pictures in which such questions are dealt with. Such educational activity is required in order to bring home to the individual the fact that he himself is ultimately responsible for his personal health and fitness, since the sanitary provision made by the community can be rendered of no avail by errors of personal hygiene; as a corollary it follows that the community has still a duty of informing the individual as to the rules of healthy living, and of advising how those rules can be applied in the changing circumstances of urban and industrial life.

Such public health instruction can be given either individually or *en masse*, and both methods have been followed locally during the last year. The Health Visitors have been assiduous in making use of the opportunities afforded them when visiting in the homes of imparting information on the particular problem of the moment, whether it be the feeding of the infant, its clothing, its nursing in minor infectious disease, the safeguarding of the family from infection with tuberculosis, or the guidance of the mother on her own health during pregnancy. Fortunately, for the last quarter of the year, the Health Visiting staff was strengthened by the additional member previously mentioned, and it is hoped to devote a little more time to this very fruitful method of conveying instruction during the coming year.

The advice given at the home visits is emphasised by the use of a number of specially prepared leaflets, including as recent additions one on cancer, and one on the diet of the school child; it is found that the combined use of the spoken and the written word more than doubles the chance of some helpful points being retained.

In view of past experience, no attempt was made to organise any special *ad hoc* meetings, but addresses on health topics were delivered by the Medical Officer of Health at a number of ordinary meetings of various social, religious and educational organisations, and the local Press afforded valuable assistance from time to time by accepting articles dealing with health topics.

Several years having elapsed since the town had joined in a "Health Week" celebration, arrangements are being made at the time of reporting for an intensive effort of this nature to be made in the second week of March, 1926.

X. NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS AVAILABLE FOR THE DISTRICT.

Professional Nursing in the Home.—The services of the Bootle District Nurses' Association are available for the nursing in their own homes of patients suffering from puerperal fever, measles, whooping cough, epidemic diarrhoea, ophthalmia neonatorum, pneumonia, and poliomyelitis; information as to cases requiring such attention is derived from the health visiting staff, and the financial arrangements with the Association provide for payment by the Council of an annual retaining fee of £35, together with a charge of 8d. per visit in approved cases. The classification of such work by the District Nurses' Association follows:—

	Carried over from 1924.	New Cases.	Total.	Total Visits.	Died.	Removed to Hospital.	Improved.	Under treatment at end of 1925.
Ophthalmia Neonatorum	3	52	55	1168	1	—	50	4
Pneumonia	—	7	7	63	1	—	4	2
Diarrhoea	—	39	39	480	3	2	34	—
Worms	—	9	9	97	—	1	7	1
Other Diseases ...	—	8	8	165	—	1	7	—
Totals	3	115	118	1973	5	4	102	7

Midwives.—Forty-five midwives signified their intention to practise within the district during the year commencing 1st January, 1925. Apart from the Staff of the Municipal Maternity Home, there is no direct employment of or subsidy to practising midwives, although since 1st April, 1922, responsibility has been accepted for the payment of the midwife's fee in such cases as are sanctioned by the Maternity and

Child Welfare Sub-Committee after consideration of the patient's income, size of family, etc.

Clinics, Treatment Centres, and Hospitals.—Three Maternity and Child Welfare Centres are provided by the Bootle Health Society—in two cases in premises lent by the Corporation, the third in a church hall; the Medical and Health Visiting Staffs are supplied by the Corporation. Ante-Natal Clinics are held once weekly in the School Medical Offices, and in an unused part of the Junior Technical School, while infant consultations are held twice weekly at the School Medical Offices, and once weekly at the Junior Technical School and St. Matthew's Hall.

The School Clinic is open daily in the premises of the School Medical Offices, and provides for ophthalmic work on two afternoons weekly, for dental work on five half-days weekly, for throat operations one half-day monthly, for remedial exercises three half-days weekly, and for inspection work and minor ailments every day. A subsidiary clinic for the treatment of minor ailments only is held daily at St. Matthew's Hall.

The Tuberculosis Dispensary is provided by the Council in converted shop premises in Irlam-road, and is open for consultations by the Tuberculosis Officer on three afternoons and one evening weekly, and for a certain amount of dispensing work at other times.

A Venereal Diseases Treatment Centre is provided by the Bootle Borough Hospital under agreement with the Corporation, and allows three consultations weekly for each sex, together with an irrigation department for males open at other times.

Hospitals provided or subsidised by the Local Authority.—The Authority has hospital provision for 28 late cases of pulmonary tuberculosis at Linacre Hospital, and for 22 early cases at Maghull Sanatorium; it also maintains six beds for non-pulmonary tuberculosis in the Leasowe Hospital for Children, and undertakes the maintenance of approved adult cases of non-pulmonary tuberculosis in certain local hospitals.

Provision for maternity cases is made in the Maternity Home of ten beds.

There is no hospital provided or subsidised by the Authority speeially for the use of ehildren, although beds are always available in the excellently equipped Alder Hey Hospital for Children maintained by the Poor Law Authority.

Isolation Hospital accommodation for the ordinary infeetious fevers is provided to the extent of 68 beds at Linaere Hospital.

An agreement is in force with the Liverpool Corporation for the reception of a limited number of smallpox cases in the hospital maintained by the Port Sanitary Authority at New Ferry; this is recognised as substitutory accommodation during the occupation of Maghull Sanatorium for tuberculosis cases, and, in the event of a large outbreak eases will be aceommodated by clearing the Sanatorium.

Ambulance Facilities.—Infectious cases are removed to hospital in one or other of the two motor ambulances belonging to the Authority. Non-infeetious and accident cases are dealt with by two ambulances belonging to the Bootle Borough Hospital, driven under arrangements by members of the Fire Brigade.

XI. HOUSING.

The availability of houses for the working classes is a fundamental requirement for the maintenance of public health, and it is satisfactory to note, therefore, that by the erection during the year of 98 additional houses on Site No. 1 the conditions of overcrowding and unsuitable aecommodation have been to that extent improved. These houses have been erected for sale to applieants, and the conditions of purchase have been so framed as to make ownership as easy as possible.

There is, however, no room for doubt as to the need for the further continuance of municipal building. Although the list of approximately 2,000 applications has not been revised with a view to the deletion of applicants whose cireumstances have altered since the date of the original application, and there is therefore no up-to-date estimate of the aetual demand, there is eommon agreement that the provision made during the last five years ean be repeated without risk of over-building.

The following tabular statement shows what has been accomplished by the Council's housing schemes:—

Number of houses completed during				1920	...	26
,,	,,	,,	,,	1921	...	76
,,	,,	,,	,,	1922	...	200
,,	,,	,,	,,	1923	...	Nil
,,	,,	,,	,,	1924	...	3
,,	,,	,,	,,	1925	...	98

Overcrowding.—As far as this department is concerned little or no action is possible other than to commend to the favourable consideration of the Housing Committee the more urgent cases of overcrowding and unsuitable accommodation brought to light. Typical of such cases are the following:—

1. Family consisting of husband, wife and five children occupying a back bedroom, which should accommodate two adults only.

2. Family consisting of husband, wife and four children; the principal tenant with his wife and seven children of ages between 19 and five years; and a second sub-tenant with his wife and three children; occupying a five-roomed house.

3. Family consisting of husband, wife and six children of ages between 10 and 2 years, occupying the back bedroom of a house consisting of kitchen, scullery and two bedrooms. The front bedroom is occupied by the principal tenant with his wife and five daughters of ages between 19 and 5 years, and a son aged 15.

4. Family consisting of husband, wife and four children of ages between 11 and 3 years (one of whom is suffering from tuberculosis) occupying two rooms. The principal tenant, his wife, two adult relatives and three children below the age of 10 years occupy the kitchen and the remaining two rooms.

5. Family consisting of husband, wife and seven children of ages ranging from 11 to 1 year, with an eighth child shortly expected, occupying the parlour and one bedroom. The prin-

cipal tenant uses the back bedroom as sleeping accommodation for her two adult sons, she herself occupying the front bedroom with three daughters and another son.

6. Family consisting of husband, wife (who is tubercular) and four children of ages between 16 years and 1 year, and the principal tenant with his wife and six children between 13 years and 1 year, occupy a five-roomed house.

Housing (Inspection of District) Regulations, 1910.—The programme of routine inspection of working class property outlined in the Survey of Housing Needs returned to the Ministry of Health in 1919 was completed during 1924, and since then the course has been adopted of carrying out routine inspections of similar types of property and of dealing with defects so found by means of the nuisance clauses of the Public Health Acts rather than under the Housing Acts. On this plan 2,460 houses have been inspected and necessary action has been taken during the year.

A statistical summary of information concerning the action taken with reference to housing conditions follows:—

UNFIT DWELLING-HOUSES.

I. *Inspection.*

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	2460
(2) Number of dwelling-houses which were inspected, and recorded under the Housing (Inspection of District) Regulations, 1910	3
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	3
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	2457

II. *Remedy of Defects without Service of formal Notice.*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1632

III. *Action under Statutory Powers.*

A. Proceedings under section 3 of the Housing Act, 1925—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	Nil
(2) Number of dwelling-houses which were rendered fit—	
(*a*) by owners	Nil
(*b*) by Local Authority in default of owners	Nil
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	Nil

B. Proceedings under Public Health Acts—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	765
(2) Number of dwelling-houses in which defects were remedied—	
(*a*) by owners	744
(*b*) by Local Authority in default of owners	3

C. Proceedings under section 11 of the Housing Act, 1925—

(1) Number of representations made with a view to the making of Closing Orders	3*
(2) Number of dwelling-houses in respect of which Closing Orders were made	Nil*
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	Nil
(4) Number of dwelling-houses in respect of which Demolition Orders were made	Nil
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil

* Closing Orders were made early in 1926 in respect of the three houses the subject of above representations.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1925 AND PREVIOUS YEARS.

Year.	Population estimated to middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths		Nett Deaths belonging to the District			
		Uncorrected Number.	Nett.						Under One Year of Age		At all Ages.	
			Number.	Rate.	Number.	Rate.*	of Non-residents registered in the District.	of Residents not registered in the District.	Number	Rate per 1,000 Nett Births	Number.	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1914.	73,230	2,279	2,321	31·7	1,033	14·1	54	263	286	123	1,242	17·0
1915.	Civil 71,617 Total 74,285	2,023	2,050	27·6	1,054	14·7	62	294	292	142	1,286	17·9
1916.	Civil 71,135 Total 77.396	2,047	2,076	26·8	1,101	15·5	80	258	227	109	1,279	18·0
1917.	Civil 68,871 Total 76,772	1,853	1,873	24·4	1,023	14·1	91	281	187	99	1,213	17·6
1918.	Civil 73,500 Total 80,500	1,781	1,810	22·5	1.224	16·6	63	268	210	116	1,429	19·4
1919.	Civil 77.000 Total 80,500	1,860	1,914	23·9	988	12·7	79	245	184	96	1,154	15·0
1920.	80,029	2,285	2,289	28·6	1,000	12·5	59	195	223	97	1,136	14·2
1921.	77,800	2.142	2,068	26·6	817	10·5	43	236	198	96	1,010	13·0
1922.	79,750	2.144	2,051	25·7	877	11·0	42	258	164	80	1,093	13·7
1923.	81,580	2,159	1,999	24·5	858	10·5	50	262	170	85	1.070	13·1
1924.	83,130	2.078	1.942	23·4	799	9·6	59	226	192	99	966	11.6
1925.	83,260	2.077	1.943	23·3	820	9·8	53	324	188	97	1,091	13·1

* These rates are based on the uncorrected numbers.
Area of District in acres, (land and inland water)—1,947.

OCCUPATIONS BY MARITAL CONDITION, INDUSTRIAL STATUS, AND AGE GROUPS AT CENSUS, 1921.

MALES.

Marital Condition			Industrial Status			Retired	Occupations.	Ages		
Single	Married	Widowed or Divorced	Employers	Employees	Workers on own account			Total over 12 years	12 to 20 Years	20 years and over
47	49	4	7	84	9	6	Agricultural Occupations	100	17	83
84	117	9	8	202	—	4	Workers in Chemicals, Paints, etc.	210	35	175
1156	1696	123	37	2919	19	27	Metal Workers	2975	468	2507
210	159	6	2	368	5	1	Electrical Apparatus Makers, Fitters, etc. ...	375	88	287
77	101	10	5	182	1	2	Workers in Skins, Leather Goods Makers ...	188	35	153
58	93	13	24	112	28	5	Makers of Textile Goods and Articles of Dress ...	164	21	143
93	172	10	33	232	10	1	Makers of Foods, Drinks, and Tobacco	275	47	228
502	763	73	20	1305	13	36	Workers in Wood and Furniture	1338	201	1137
177	355	35	19	540	8	10	Builders, Bricklayers, etc.	567	36	531
95	177	15	14	264	9	1	Painters and Decorators	287	38	249
289	419	33	11	727	3	8	Workers in mixed and undefined Materials ...	741	141	600
88	169	13	—	270	—	1	Workers in Gas, Water, and Electric Supply ...	270	33	237
3877	4618	417	45	8822	45	105	Transport Workers	8912	1378	7534
573	778	46	218	942	237	27	Commercial and Financial Occupations	1397	241	1156
190	225	8	—	423	—	26	Public Administration and Defence	423	28	395
149	200	6	14	300	41	13	Professional Occupations	355	25	330
206	297	16	51	408	60	4	Persons Employed in Personal Service	519	102	417
909	517	31	—	1457	—	8	Clerks, Draughtsmen, Typists, etc.	1457	340	1117
138	247	26	—	411	—	2	Warehousemen, Packers, etc.	411	27	384
136	358	26	—	520	—	3	Stationary Engine Drivers	520	66	454
933	1119	120	—	2172	—	10	General or Undefined Labourers	2172	309	1863
400	469	66	15	902	18	16	All other Occupations	935	155	780
10387	13098	1106	523	23562	506	316	Total Occupied	24591	3831	20760
2627	344	226	—	—	—	—	Unoccupied, including Retired	3197	2441	756
13014	13442	1332	—	—	—	—	Total Occupied and Unoccupied	27788	6272	21516

OCCUPATIONS BY MARITAL CONDITION, INDUSTRIAL STATUS, AND AGE GROUPS AT CENSUS, 1921.

FEMALES.

Marital Condition			Industrial Status			Retired	Occupations.	Ages		
Single	Married	Widowed or Divorced	Employers	Employees	Workers on own account			Total over 12 years	12 to 20 years	20 years and over
168	14	8	—	190	—	2	Textile Workers	190	88	102
635	39	57	17	610	104	5	Makers of Textile Goods and Articles of Dress ...	731	243	488
398	22	26	13	426	7	—	Makers of Foods, Drinks, and Tobacco	446	144	302
166	6	7	2	175	2	—	Workers in Wood and Furniture	179	83	96
114	2	3	—	117	2	—	Paper Workers, Printers, etc.	119	62	57
107	5	4	—	114	2	—	Workers in Mixed or Undefined Occupations ...	116	49	67
168	17	46	1	229	1	—	Transport Workers	231	92	139
995	145	132	61	1039	172	2	Commercial and Financial Occupations	1272	405	867
90	4	1	—	95	—	1	Public Administration and Defence	95	27	68
416	30	34	8	415	57	6	Professional Occupations	480	30	450
39	9	2	—	49	1	—	Persons engaged in Entertainments, etc. ...	50	13	37
1628	280	452	31	2198	131	11	Persons engaged in Personal Service	2360	598	1762
959	10	11	—	980	—	—	Clerks, Typists, etc.	980	380	600
352	8	14	—	374	—	1	Warehousewomen, Packers, etc.	374	154	220
1009	37	31	—	1073	4	2	All other Occupations	1077	599	478
7244	628	828	133	8084	483	30	TOTAL OCCUPIED	8700	2967	5733
4794	13420	2360	—	—	—	—	UNOCCUPIED, including Retired	20574	3243	17331
12038	14048	3188	—	—	—	—	TOTAL OCCUPIED AND UNOCCUPIED	29274	6210	23064

Appendix 3.

CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR 1925.

Notifiable Diseases.	Number of Cases Notified.								Total Cases Notified in each Locality (e.g., Parish or Ward) of the District.					
	At all Ages.	At Ages—Years.												
		Under 1 year	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera-Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous Croup)	72	2	19	38	7	6	—	—	8	7	18	12	22	5
Erysipelas	26	—	—	—	1	5	15	5	5	7	3	5	4	2
Scarlet Fever	155	1	42	95	9	7	1	—	31	35	9	16	27	37
Typhus Fever...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	5	—	—	—	2	3	—	—	1	—	1	1	1	1
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	6	—	—	—	1	5	—	—	1	1	1	1	1	1
Cerebro-spinal Meningitis ...	2	—	—	—	1	1	—	—	—	1	—	—	1	—
Poliomyelitis	1	—	1	—	—	—	—	—	—	—	1	—	—	—
Ophthalmia Neonatorum ...	37	37	—	—	—	—	—	—	8	4	9	5	8	3
*Infantile Diarrhœa	80	32	48	—	—	—	—	—	6	3	34	19	16	2
Influenzal Pneumonia ...	6	—	—	2	2	—	2	—	—	1	3	—	2	—
Acute Primary Pneumonia ...	90	13	43	11	6	12	3	2	4	4	41	16	17	8
Trench Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	5	—	—	—	2	2	1	—	—	—	—	—	4	1
Encephalitis Lethargica ...	4	—	—	—	1	2	1	—	—	2	1	—	1	—
Dysentery	1	—	—	—	—	—	—	1	—	—	1	—	—	—
Totals	490	85	153	146	32	43	23	8	64	65	122	75	104	60

* Voluntary notification of cases under the age of two years during July, August and September.

Isolation Hospital or Hospitals, Sanatoria, etc.:—Corporation Hospital, Linacre Lane, Bootle; Bootle Sanatorium, Maghull.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1925.

Causes of Death.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 and upward.	
All causes { Certified	1058	179	67	41	41	52	132	255	291	132
All causes { Uncertified	33	9	2	..	..	..	6	6	10	4
Enteric Fever	..	..	..	..	..	..	..	..	..	..
Small-pox	..	..	..	..	..	..	..	..	..	..
Measles	27	5	17	4	..	..	1	..	..	1
Scarlet Fever	5	..	..	2	2	..	1	..	..	5
Whooping Cough	16	7	7	2	..	..	..	..	..	1
Diphtheria and Croup	4	..	1	2	1	..	..	..	..	4
Influenza	8	..	..	..	..	1	2	1	4	..
Erysipelas	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	113	..	1	2	3	24	49	27	7	17
Tuberculous Meningitis	6	2	2	1	..	1	..	..	..	5
Other Tuberculous Diseases	13	1	2	..	2	4	3	..	1	2
Cancer, malignant disease	94	..	..	..	..	1	16	42	35	4
Rheumatic Fever	6	..	..	..	5	..	1	..	..	1
Meningitis	10	3	2	1	2	1	..	1	..	2
Organic Heart Disease	67	..	..	..	3	1	7	25	31	1
Bronchitis	70	8	2	..	..	1	1	19	39	5
Pneumonia (all forms)	146	40	22	14	4	2	16	24	24	14
Other diseases of respiratory organs	16	1	..	..	1	..	..	7	7	2
Diarrhœa and Enteritis	44	30	10	1	2	..	..	1	..	7
Appendicitis and Typhlitis	5	..	..	..	3	1	..	1	..	3
Cirrhosis of Liver	..	..	..	..	..	..	..	..	..	..
Alcoholism	1	..	..	..	..	..	..	..	1	..
Nephritis and Bright's Disease	39	..	..	1	1	3	2	12	20	7
Puerperal Fever	1	..	..	..	..	..	1	..	..	..
Other accidents and diseases of Pregnancy and Parturition	4	..	..	..	..	1	3	..	..	..
Congenital Debility and Malformation, including Premature Birth	70	69	1	..	..	..	..	..	..	9
Violent Deaths, excluding Suicide	29	..	1	4	6	2	3	8	5	22
Suicide	6	..	..	..	..	..	5	1	..	2
Other Defined Diseases	269	17	1	7	6	9	22	86	121	24
Diseases ill-defined or unknown	22	5	..	..	..	..	5	6	6	4
Totals	1091	188	69	41	41	52	138	261	301	142

SUB-ENTRIES INCLUDED IN ABOVE FIGURES.

Cerebro-spinal Fever	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	..	..	..	..	..	..	..	..	..	..
Broncho-pneumonia	96	36	17	12	4	2	3	9	13	8
Venereal Diseases	2	..	..	..	..	..	2	..	..	..
Cerebral Hæmorrhage	30	..	..	..	..	..	3	12	15	2
Arterio-Sclerosis	26	..	..	..	..	..	..	7	19	1
Senile Decay	40	..	..	..	..	..	..	2	38	..
Tetanus	..	..	..	..	..	..	..	..	..	..
General Paralysis of Insane	2	..	..	..	..	..	1	..	1	..
Aneurism	..	..	..	..	..	..	..	..	..	..
Locomotor Ataxy	..	..	..	..	..	..	..	..	..	..

INFANT MORTALITY.

1925. Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under One Year.
All Causes (Certified ... ...)	34	12	11	6	63	32	29	20	36	180
All Causes (Uncertified ... ..)	2	—	—	1	3	4	—	1	—	8
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	1	1	3	5
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	2	2	3	7
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	1	—	1	2
Abdominal Tuberculosis	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	—	—	—	—	—	1	—	—	—	1
Meningitis (*not Tuberculous*)	—	—	—	—	—	—	1	—	2	3
Convulsions	3	—	—	1	4	2	—	1	1	8
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	1	—	1	2	3	2	—	8
Pneumonia (all forms)	—	2	1	—	3	6	6	12	13	40
Diarrhœa	—	—	—	—	—	1	2	—	2	5
Enteritis	—	2	—	—	2	8	5	2	8	25
Gastritis	—	—	—	—	—	—	—	—	—	—
Syphilis	—	—	—	—	—	—	—	—	—	—
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	—	—	—	—	—	—	—	—	—
Injury at Birth	1	—	—	—	1	—	—	—	—	1
Atelectasis	—	—	—	—	—	—	—	—	—	—
Congenital Malformations	3	1	2	1	7	2	1	—	2	12
Premature Birth	19	4	5	1	29	4	—	—	—	33
Atrophy, Debility and Marasmus ...	6	2	2	1	11	7	5	—	1	24
Other Causes	4	1	—	3	8	3	2	1	—	14
Totals	36	12	11	7	66	36	29	21	36	188

Nett Births in the year { legitimate infants ...1,869 / illegitimate infants... 74

Nett Deaths in the year { legitimate ... 176 / illegitimate... 12

Appendix 6.

SUMMARY OF WORK DONE BY THE SANITARY INSPECTORS.

Nuisances—

No. of complaints made by inhabitants		1602
No. of nuisances discovered on above complaints		3696
No. of nuisances discovered on house to house inspections		2154
No. of re-inspections of nuisances		15991
Notices to owners—		
Choked and defective drains	309	
Choked and defective downspouts and raingutters	505	
Defective roofs	483	
Defective yard surfaces	394	
Defective water pipes	136	
Other defects	3013	
Notices served on occupiers—		
Overcrowding in rooms	17	
Dirty conditions	31	
Removal of fowls and other animals	11	
Removal of manure	1	
Removal of rubbish	12	
Non-separation of sexes	2	
No. of defective ashbins renewed		147
No. of informations laid		3
No. of Magistrates' Orders obtained		1
Amount of fines and costs		£1/0/6

Cinematograph Shows—

There were five picturedromes in the town, and they received fifty-two inspections.

Canal Boats—

No. of canal boats inspected	189
,, infringements *re* certificates	5
,, other defects	6
,, Notices sent in respect of same	4
,, defects or infringements where necessary work was done without service of notice	7

Common Lodging Houses—

No. of inspections	148
No. registered under the Public Health Act, 1875	3
,, informations laid in respect of infringements	—

STEPS TAKEN TO PREVENT NUISANCE FROM SMOKE—

No. of observations made	99
,, intimations sent	11
,, notices served in respect of excessive black smoke	3
,, informations laid	1
Amount of fines and costs	14s. 6d.

DAIRIES, COWSHEDS, AND MILKSHOPS—

No. of milkshops on register	37
,, shippons with dairies attached	24
,, inspections made—shippons 243, milkshops 305	547

The occupiers of shippons and milk shops have from time to time been verbally cautioned with regard to the cleanliness of the premises and the cows, the proper storage of milk, and the covering of milk vessels.

FOOD INSPECTIONS—

No. of visits to foodshops	3033
Amount of food seized (see page 25).	
No. of inspections of hawkers' carts	63
No. of inspections of food factories	134

SUMMARY OF LEGAL PROCEEDINGS—

Defective drains, etc.	3
Infringements of Sale of Food and Drugs Acts	11
Smoke nuisanees	1
Common lodging houses	—
Sub-let houses	—
Unsound food	—

INSPECTIONS OF HOUSES MADE UNDER INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACT ... ... Nil.

No. of Certificates issued by Local Authority	Nil.
Work completed before Certificate was issued	Nil.

DISINFECTION : INFECTIOUS DISEASES—

No. of houses disinfeeted after notifiable infectious diseases	238
,, houses disinfeeted after phthisis	203
,, premises disinfected after measles	3
,, visits made to infeeted houses	316
,, re-visits made to infected houses	220
,, houses cleaned in default of or at request of owners	32
,, houses disinfected for causes other than fevers	15

All houses assessed at £15 per annum or less are cleaned after infectious disease (i.e., the walls stripped and the ceilings whitened), by the Corporation at their own cost; in case of phthisis the Corporation strip, when necessary, whatever the rent.

FILTHY HOUSES—

No. of houses reported	16
,, intimations sent	16
,, houses cleansed	16

LIST OF ARTICLES DISINFECTED—

	Bootle.	Formby.	Totals.
Paillasses	326	34	360
Mattresses	338	—	338
Beds	435	9	444
Bolsters and Pillows	1672	80	1752
Blankets	1048	103	1151
Quilts	570	30	600
Sheets	804	57	861
Carpets	77	4	81
Wearing Apparel	2486	164	2650
Miscellaneous Articles	599	48	647
	8355	529	8884

NOTE.—These figures do not include the ambulance bedding (one bed, one pillow, and three blankets), which is disinfected after the removal of each case.

One hundred and twenty-eight library books and ninety books from Formby were disinfected.

The following articles were destroyed at the request of the owners:—

Mattresses, 2; Pillows and Bolsters, 12; Beds, 10; Paillasses, 7; Blankets, 8; Quilts, 3; Sheets, 3; Carpet, 1; and Miscellaneous, 57.

FLUSHING.

The flushing gang consists of two Corporation workmen and a Liverpool waterman.

No. of private houses at which drains were flushed	11692
No. of passage sewers flushed	669

Drains were flushed at public buildings 84 times.

The drains at the Bootle Borough Hospital, the Bootle Hospital Nurses' Home, the Bootle Maternity Home (51, Balliol Road), and the Liverpool Maternity Home in Hawthorne Road, were each flushed 12 times during the year.

The amount of fresh water used during the year was 2,503,990 gallons. The amount of salt water was 58,360 gallons.

FACTORY AND WORKSHOP ACT.

Workshops and Workplaces (excluding Bakehouses)—	
No on register	108
No of visits and re-visits	676
,, workrooms with dirty walls	6
,, ,, ,, ceilings	3
,, ,, ,, floors	—
,, ,, ,, lavatories	2
,, ,, not properly ventilated	—
,, ,, found overcrowded	—
,, defective drains and water closets	6
,, miscellaneous defects found	2
,, notices issued to occupiers	13
,, notices issued to owners	5
,, notices complied with	18
,, references to the Factory Inspector	3
Factories—	
No. of visits and re-visits	174
No. with insufficient or unsuitable sanitary accommodation	1
No. referred to Borough Engineer	1
No. referred to Factory Inspector	—
Bakehouses—	
No. on register	23
No. of visits and re-visits	248
,, bakehouses found dirty (walls and ceilings and floors)	2
,, notices issued for limewashing	1
,, notices issued for dirty yard surface	—
,, bakehouses taken off the register during the year	3
Confectionery Bakehouses—	
No. on register	22
No. of visits and re-visits	185
No. found dirty (walls and ceilings)	1
No. of notices issued for limewashing	1
Outworkers—	
No. of outworkers on register at end of year	1
,, visits and re-visits made to houses of outworkers	8
,, notices served for sanitary defects at houses of outworkers	1
Outworkers employed in Bootle for Liverpool firms engaged in :—	
Tailoring	—
Underclothing	1

APPENDIX 7.

SALE OF FOOD AND DRUGS ACTS.

SAMPLES TAKEN, 1925.

	Total Number of Samples Analysed	Number reported to be adulterated or not up to standard	Number of Prosecutions	Number of Convictions	Remarks
Milk	104	15	11	8	Two cases were withdrawn and one case was dismissed. In two instances the samples were informal and convictions were recorded subsequently for formal samples against the vendors. In the 2 cases not proceeded with, the adulteration was so trivial as not to warrant prosecution.
Condensed Milk ..	12	.	...	..	
Butter	40	...	...	...	
Baking Powder ..	1	...	...	...	
Lemon Cheese ..	3	1		...	See page 27
Self-raising Flour ..	3	...	...	...	
Glycerine	2	...	...	...	
Pepper	2	.	...	..	
Lard...	2	...	...	...	
Rice	3	...	...	...	
Cocoa .. .	2	...	.	...	
Castor Oil	1	..	.	...	
Cheese	6	...	...	..	
Mineral Waters .	4	...	.	...	
Beer	2	...	...	...	
Custard Powder ...	2	...	...	..	
Preserved Cream ..	4	1	...	...	See page 27
Calves Feet Jelly .	1	...	. .	...	
Camphorated Oil ...	1	.	..	...	
Totals ...	195	17	11	8	

APPENDIX 8.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications received during the period from 4th January, 1925, to 2nd January, 1926.

Notifications on Form A.

AGE-PERIODS	Number of Primary Notifications											Total Primary Notifications	Total Notifications on Form **A.**
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards		
Pulmonary, Males	...	2	9	5	13	13	21	22	24	10	11	130	159
,, Females ...	...	1		7	15	20	23	12	15	2	2	103	119
Non-pulmonary, Males ...	...	2	4	3	4	1	1	1	1	...	...	17	23
,, ,, Females ...	1	3	9	10	3	5	1	...	...	...	...	32	42

Notifications on Form B.

AGE-PERIODS	Number of Primary Notifications				Total Notifications on Form **B.**
	Under 5	5 to 10	10 to 15	Total Primary Notifications	
Pulmonary, Males	...	..	...	...	...
,, Females ...	...	...	...	...	...
Non-pulmonary, Males ...	...	...	...	...	...
,, ,, Females ...	...	...	...	...	...

Number of Notifications on Form C.

Poor Law Institutions	Sanatoria
...	63
...	63
...	5
...	2

SUPPLEMENTAL RETURN.

NEW cases of Tuberculosis coming to the knowledge of the Medical Officer of Health or Chief (Administrative) Tuberculosis Officer during the period from the 4th January, 1925, to the 2nd January, 1926, OTHERWISE than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912.

AGE PERIODS	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Cases
Pulmonary Males	...	1	...	...	1	...	3	5	4	1	1	16
,, Females ..	...	...	...	...	...	1	3	3	...	..	1	8
Non-pulmonary Males ...	1	3	...	1	1	...	...	...	...	...	...	6
,, Females ...	2	...	...	...	3	...	...	1	...	...	1	7

APPENDIX 9.

MINISTRY OF HEALTH. FORM T53. (Memo. 37/T., Table I.).

RETURN SHOWING THE WORK OF THE DISPENSARY DURING THE YEAR 1925.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults		Children		Adults.		Children		Adults.		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the the year (excluding contacts) :—												
(*a*) Definitely tuberculous ...	49	55	8	6	7	5	8	14	56	60	16	20
(*b*) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	5	2	12	5
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	6	14	20	28
B.—CONTACTS examined during the year :—												
(*a*) Definitely tuberculous ...	1	4	3	3	—	—	3	2	1	4	6	5
(*b*) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	—	2	7	3
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	23	19	34	71
C.—CASES written off the Dispensary Register as												
(*a*) Cured	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)	—	—	—	—	—	—	—	—	44	61	64	112
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—												
(*a*) Diagnosis completed ...	282	467	63	72	56	53	93	105	338	520	156	177
(*b*) Diagnosis not completed ...	—	—	—	—	—	—	—	—	4	5	19	8

1. Number of persons on Dispensary Register on January 1st	1234	9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	10
2. Number of patients transferred from other areas and of "lost sight of" cases returned	11	10. Number of consultations with medical practitioners :—	
3. Number of patients transferred to other areas and cases "lost sight of"	42	(*a*) At Homes of Applicants ...	26
		(*b*) Otherwise	80
4. Died during the year	114	11. Number of other visits by Tuberculosis Officers to Homes ...	—
		12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes	2192
5. Number of observation cases under A (*b*) and B (*b*) above in which period of observation exceeded 2 months	10	13. Number of	
		(*a*) Specimens of sputum, etc., examined	363
6. Number of attendances at the Dispensary (including Contacts) ...	5778	(*b*) X-ray examination made in connection with Dispensary work	12
		14. Number of Insured Persons on Dispensary Register on the 31st December	383
7. Number of attendances of non-pulmonary cases at Orthopaedic Outstations for treatment or supervision	5	15. Number of Insured Persons under Domiciliary Treatment on the 31st December	188
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for		16. Number af reports received during the year in respect of Insured Persons :—	
(*a*) "Light" treatment	271	(*a*) Form G.P. 17	163
(*b*) Other special forms of treatment	—	(*b*) Form G.P. 36	6

APPENDIX 9 (*Continued*).

MINISTRY OF HEALTH. FORM T54. (Memo. 37/T., Table II.).

RESIDENTIAL INSTITUTIONS.

(A). AVERAGE NUMBER OF BEDS AVAILABLE FOR PATIENTS DURING THE YEAR 1925.

—	Observation.	Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis.		Total
		"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones & Joints	Other Conditions	
Adult Males ...	—	12	12	1	—	25
Adult Females ...	—	10	12	1	—	23
Children under 15...	—	—	—	6	—	6
Total ...	—	22	24	8	—	54

(B) RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT DURING THE YEAR 1925.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of Patients	Adults.	M.	23	64	57	7	23
		F.	10	50	14	1	15
	Children.	M.	4	9	10	—	3
		F.	12	18	20	1	9
Number of Observation Cases ...	Adults.	M.	—	1	—	*1	—
		F.	1	—	1	—	—
	Children.	M.	—	—	—	—	—
		F.	—	—	—	—	—
Total			50	142	132	10	50

* Non-Tuberculous.

MINISTRY OF HEALTH. FORM T55. (Memo 37/T., Table III.).

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS* AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED FROM RESIDENTIAL INSTITUTIONS DURING THE YEAR 1925.

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total.
			Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	4	16	2	3	2	3	1	1	8	—	—	—	40
		No material improvement ...	—	—	1	—	1	—	—	—	—	—	—	—	2
		Died in Institution	1	—	—	—	—	—	—	—	—	—	—	—	1
	Class T.B. plus Group 1.	Quieseent	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	7	4	—	1	2	—	3	1	1	—	—	—	19
		No material improvement ...	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus Group 2.	Quieseent	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	10	4	—	6	3	—	—	1	—	—	—	—	24
		No material improvement ...	4	2	—	—	—	—	—	—	—	—	—	—	6
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus Group 3.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	4	4	1	1	1	—	1	1	—	1	—	—	14
		No material improvement ...	3	2	—	—	—	—	—	1	—	—	—	—	6
		Died in Institution	6	2	—	—	—	—	—	—	—	—	—	—	8

MINISTRY OF HEALTH. FORM T55. (Memo. 37/T., Table III)—*Continued.*

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total.
			Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Non-Pulmonary Tuberculosis.	Bones and Joints.	Quiescent or Arrested ...	—	—	—	—	—	—	—	—	1	—	—	—	1
		Improved	1	1	1	—	—	—	—	—	1	—	—	1	5
		No material improvement ...	—	—	—	—	—	—	1	—	—	—	—	—	1
		Died in Institution	—	—	1	—	—	—	—	—	—	—	—	—	1
	Abdominal	Quiescent or Arrested ...	—	—	—	1	—	—	—	—	1	—	—	—	2
		Improved	—	1	—	—	—	—	—	—	—	—	—	—	1
		No material improvement ...	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Organs.	Quiescent or Arrested ...	—	—	—	—	—	—	—	—	1	—	—	—	1
		Improved	2	—	—	—	—	—	—	—	—	—	—	—	2
		No material improvement ...	1	—	—	—	—	—	—	—	—	—	—	—	1
		Died in Institution	—	—	1	—	—	—	—	—	—	—	—	—	1
	Peripheral Glands.	Quiescent or Arrested ...	—	—	—	—	—	1	—	—	—	—	—	—	1
		Improved	1	1	1	—	—	—	—	—	—	—	—	—	3
		No material improvement ...	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—

			Under 1 week.			1—2 weeks.			2—4 weeks.			More than 4 weeks.			Total
Observation for purpose of diagnosis		Tuberculous	—	—	—	—	—	—	—	—	—	—	—	—	—
		Non-tuberculous	—	—	—	1	—	—	—	1	—	—	—	—	2
		Doubtful	—	—	—	—	—	—	—	—	—	—	—	—	—

* It should be borne in mind that the definition of "patient" does not include persons in whom a definite diagnosis of tuberculosis has not been made.

APPENDIX 10.

VENEREAL DISEASES TREATMENT CENTRE. COPY OF REPORT BY DR. CLEMMEY.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than Venereal.		Total.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which—										
(*a*) at the beginning of the year under report were under treatment or observation for:	65	32	—	—	76	9	8	1	149	42
(*b*) had been marked off *in a previous year* as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report *suffering from the same infection*	38	12	—	—	90	4	11	—	139	16
Total—Items 1 (*a*) & (*b*) ...	103	44	—	—	166	13	19	1	288	58
2. (*a*) Number of cases dealt with at the Treatment Centre during the year *for the first time*	76	16	5	—	153	4	69	1	303	21
*Total—Items 1 (*a*), 1 (*b*) & 2 (*a*)	179	60	5	—	319	17	88	2	591	79
2. (*b*) Number of cases *included* in Item 2 (*a*) known to have received *previous treatment at other Centres* for the same infection	23	—	2	—	31	—	4	—	60	—
3. Number of cases which ceased to attend—										
(*a*)—before completing the first course of treatment for :—	20	6	1	—	55	3	—	—	76	9
(*b*)—after one or more courses but before completion of treatment for:—	19	7	—	—	—	—	—	—	19	7
(*c*)—after completion of treatment, but before final tests as to cure of:—	21	26	—	—	43	1	—	—	64	27
4. Number of cases transferred to other Treatment Centres after treatment for :—	23	—	2	—	33	—	—	—	58	—
5. Number of cases discharged after completion of treatment and observation for :—	32	—	—	—	94	9	55	—	181	9
6. Number of cases which, at the end of the year under report, were under treatment or observation for :—	64	21	2	—	94	4	33	2	193	27
*Total—Items 3, 4, 5 and 6 ...	179	60	5	—	319	17	88	2	591	79
7. Out-patient attendances—										
(*a*)—For individual attention by the Medical Officer	1556	439	16	—	1921	111	170	17	3663	567
(*b*)—For intermediate treatment, *e.g.*, irrigation, dressings, etc.	183	—	1	—	2206	—	—	—	2390	—
Total Attendances	1739	439	17	—	4127	111	170	17	6053	567
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from :—	41	122	—	—	252	28	—	—	293	150

* The total of Items 1 (a), 1 (b) and 2 (a) in the vertical columns headed Syphilis, Soft Chancre, and Gonorrhœa should agree with the corresponding total of Items 3, 4, 5, and 6.

APPENDIX 10.—*Continued.*

	For detection of			For
	Spirochætes.	Gonococci.	Other Organisms.	Wassermann Reaction.
9. Examinations of Pathological material :—				
(*a*) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre	Nil	121	Nil	Nil
(*b*) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory	Nil	Nil	Nil	152

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales).	Bootle.	Liverpool.	Lancs.	Other areas.	Total.
A †Number of cases from each area dealt with during the year *for the first time* and found to be suffering from :—					
Syphilis	38	13	18	23	92
Soft chancre	4	—	—	1	5
Gonorrhœa	70	21	34	32	157
Conditions other than venereal	45	10	11	4	70
TOTAL ...	157	44	63	60	324
B. †Total number of attendances at the out-patient Clinic of all patients residing in each area ..	4829	639	927	225	6620
C. †Aggregate number of "In-patient days" of all patients residing in each area	367	—	66	10	443
D. Number of doses of arsenobenzol compounds given in the :—					
1. Out-patient Clinic	221	110	93	43	467
2. In-patient Dept.	7	6	4	2	9
to patients residing in each area					

E. Give the names of arsenobenzol compounds used in the treatment of syphilis and the usual initial and final doses.

Neokharsivan } From 0·45 grms
Novarsenobillon } to 0·9 ,,

F. State the amount and kind of treatment usually administered to a case of Syphilis of each of the types usually dealt with at the Treatment Centre.

Intramuscular injections of Iodo-Bismuthate of Quinine are also used. Six at least to commence, often up to twelve and repeated after blood test whether positive or negative until case shews repeated negatives.

G. State the nature of tests applied in deciding as to discharge of patients referred to in Item 5 on previous page.

Syphilis—Repeated negative Wassermann tests.
Gonorrhœa—After satisfactory evidence that there is no gonorrhœal and urethral discharge and no gonococci.

† The totals in Item A should agree with the corresponding totals in Item 2 (a) on the previous page, and the totals in Items B and C should agree with the respective totals in Items 7 and 8 on the previous page.

W. N. CLEMMEY,
Medical Officer of the Treatment Centre.

1st March, 1926.

APPENDIX 11.

VENEREAL DISEASES.

Annual Return of Pathological Examinations made during the year ended on the 31st December, 1925.

At the University of Liverpool—		
For detection of spirochaetes—For Treatment Centre		—
For Practitioners		—
For detection of gonococci—For Treatment Centre		—
For Practitioners		1
For Wassermann reaction—For Treatment Centre		195
For Practitioners		37
		233

APPENDIX 12.

WORK DONE BY THE WELFARE VISITORS.

Total visits paid	17920
First visits to infants	1905
Routine visits to infants	5563
Visits to children, aged 1 to 2 years	2788
Visits to children, aged 2 to 5 years	4546
First visits to expectant mothers	421
Routine visits to expectant mothers	622
Ophthalmia Neonatorum—First visits	55
,, ,, Routine visits	161
Special visits to cases of Diarrhoea	265
,, ,, Measles	541
Visits *re* still-births	51

APPENDIX 13.

ANTE-NATAL CLINICS.

JANUARY 1st, 1925, to DECEMBER 31st, 1925.

	Balliol Road Clinic.	Marsh Lane Clinic.	Totals.
Number of times Clinics opened	49	49	98
Number of attendances made	1309	1238	2747
Number of new cases	241	203	444
Number of patients under treatment at end of 1924	43	28	71
Normal labour	104	115	219
Abortion	—	3	3
Stillbirth	3	2	5
Lived few days	2	1	3
Difficult labour	6	6	12
Not pregnant	16	25	41
Transferred	2	4	6
Ceased attending	24	12	36
Referred to Hospital or Maternity Home	77	15	92
Caesarian section	—	1	1
Number under treatment at end of 1925	50	47	97
Wassermann—			
Positive	1	2	3
Slightly positive	—	—	—
Negative	1	2	3
Smears taken for Gonococci—			
Positive	—	—	—
Negative	1	—	1

APPENDIX 14.

LINACRE HOSPITAL.—Revised Diagnoses and Complications.

SCARLET FEVER ADMISSIONS.	Bootle	Lither land
Re-diagnosed as :—		
Scarlet Fever and Chickenpox ...	4	—
Scarlet Fever and Empyema ...	1	—
Scarlet Fever and Fractured Thigh ...	1	—
Scarlet Fever and Measles	2	—
Scarlet Fever and Pulmonary Tuberculosis	1	—
Scarlet Fever and Tubercular Adenitis	1	—
Scarlet Fever and Whooping Cough ...	1	—
Erythema	4	—
Measles	4	1
Tonsillitis	3	—
No disease found	1	—
Totals	23	1

DIPHTHERIA ADMISSIONS.	Bootle	Lither land
Re-diagnosed as :—		
Diphtheria and quinsy	1	—
Diphtheria and nasal suppuration ...	1	—
Catarrhal Laryngitis	1	1
Febricula	1	—
Mumps	1	—
Pneumonia and Thrush	—	1
Pneumonia and Valvular Heart Disease	—	1
Quinsy	1	—
Scarlet Fever	1	—
Tonsillitis	24	4
Tubercular Mediastinal Glands ...	1	—
Vincent's Angina	—	1
Totals	32	8

APPENDIX 15.

LOCAL POWERS RELATING TO PUBLIC HEALTH.

(1) Acts of Parliament adopted by the Council.

Infectious Disease (Notification) Act, 1889.

Infectious Disease (Prevention) Act, 1890, sections 5, 6, 14, 15, 16, 17, 18, 20, and 21.

Public Health Acts Amendment Act 1890, Part III.

Housing of the Working Classes Act, 1890, Part III.

Notification of Births Act, 1907.

Sections 22, 23, 24, 33, 35, 44, 50, 51, 52, 53, 54, 57, 61, 62, 63, 64, 65, 69, 70, 71, 72, 73, 74, 75, 85, 90, 91, 93 and 95, Public Health Acts Amendment Act, 1907.

(2) Bootle Corporation Acts and Orders.

Bootle Corporation Act, 1890.

Bootle Order, 1897; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 16) Act, 1897, relative to Sanitary Improvements.

Bootle Corporation Act, 1899.

Bootle Order, 1914; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 6) Act, 1914, relating to the substitution of moveable ashpits for fixed ashpits.

Bootle Corporation Act, 1920.

(3) Bye-Laws and Regulations in force in the Borough.

New Streets and Buildings, 1869.

Nuisances, 1887.

Slaughter Houses, 1887.

Good Rule and Government, 1888.

New Streets and Buildings, 1890.

Common Lodging Houses, 1894.

Dairies, Cowsheds, and Milkshops, 1894 and 1902.

Carriage of Offensive Matter through Streets, 1898.

New Streets and Buildings and Alteration of Buildings, 1899.

Removal of House Refuse and Nuisances, 1899.

Structure of Walls of New Buildings, 1900.

Structure of Foundations of New Buildings and Construction of New Streets, 1904.

Hospitals provided by the Corporation, 1904.

Houses let in Lodgings, or occupied by members of more than one family, 1904.

New Buildings, Ashpits in connection with Buildings, Removals of House Refuse and Nuisances, 1907.

New Streets (width), 1908.

Construction of Walls of New Public Buildings and New Warehouse Buildings, 1910.

Parasitic Mange—Regulations as to cleansing and disinfection, 1910.

Houses let in lodgings, 1912.

Ashpits in connection with buildings and the removal of house refuse, 1925.